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ABSTRACT

Early career outcomes and evaluations of the college experiences of 1975 graduates of Boston State College are reported. These evaluations and outcomes are related to prior academic performance as students, to family and peer influences, and to elements of personal and socioeconomic background. The administration of a questionnaire generated information about the following variables: socioeconomic standing; father's occupation; family size; parents' education and employment; experiences prior to college; high school preparation; number of other colleges applied to and number of acceptances to other colleges; high school rank; parental feelings about their college attendance; age, sex, and race; expectations about future standard of living; expectations about college resulting in knowledge or credentials; duration of college study; academic expectations and achievements; unmet academic needs; salary outcomes by sex and major; effects of race and age on salary outcomes; information on employment by college major; job satisfaction; graduate school attendance; academic and personal satisfaction; and satisfaction with income and work. (SW)

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REPORT OF A SURVEY

OF

1975 GRADUATES

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SECTION I: SURVEY DESIGN AND SAMPLING

The design of this study of 1975 graduates of Boston State College (hereinafter abbreviated BSC) began in July, 1976. Its purpose is mainly to describe graduates' early career outcomes and evaluations of their college experiences while relating these evaluations and outcomes to their prior academic performance as students, their family and peer influences and to elements of their personal and socioeconomic background. Toward this end a lengthy questionnaire was prepared and mailed to these graduates in late August, 1976.

The Population

The official BSC commencement list for 1975 included 867 names. Normally, BSC insists that every name on this graduation list be cleared through the Dean of Students' office so that each candidate can be certified for graduation. It is unlikely, therefore, that many names would appear of persons who did not actually graduate. However, it is considerably more likely that names of actual graduates might be omitted due to clerical error or confusion over one or another grade, fulfillment of graduation requirements, or the like. Hence, I decided to try to locate names of others who might have graduated in 1975.

I requested from the computing center a mailing list of all persons who were last enrolled for coursework during 1975 but who were not known to be dropouts. The list added the names of 47 persons to whom I also mailed questionnaires. These procedures cannot totally assure that all 1975 graduates were definitely identified and contacted, but, considering the lack of an official list of such persons, it seemed to provide the best available approximation of the total population, with a slight danger

of possibly including a few inappropriate names. As a final precaution, therefore, the questionnaire asked respondents in what year they had graduated in order to screen possible errors of "overinclusion."

During the final week of August the questionnaire was mailed to a total of 914 persons believed to be graduates of the class of 1975. By the first week of October, 1976 a total of 318 completed questionnaires had been returned, and a second-wave letter was prepared for mailing to non-respondents. Excluded from the second mailing were all those whose questionnaires had been returned unopened and undelivered by the Post Office. A quick perusal of the names of these "dead ends" indicated a heavy concentration of foreign students who, not surprisingly, had apparently been living in temporary situations and residences where they were no longer known and for whom, consequently, there were no forwarding addresses.

Stragglers, persons now out-of-state or overseas whose questionnaires were forwarded by parents, and those successfully prodded by the second-wave reminder letter accounted for 22 more completed questionnaires which were eventually returned between mid-October and early December. Since over 500 reminders were mailed out, and since about half of the additional 22 questionnaires either definitely or probably would have been returned without the reminder, the second-wave letter retrospectively seems to have been an unproductive strategy. Only about one in 50 persons who received a reminder was thus prompted to complete the questionnaire. In the future, phone contacts with non-respondents may prove more fruitful.

The final total of respondents stands at 340. This represents 37% of the 914 persons to whom questionnaires were initially mailed. However, 97 of these questionnaires were returned as undeliverable, so a maximum of 817 were actually received and, therefore, capable of completion. Of these 817, then, 42% were returned.

Though to my knowledge no accepted standards exist for judging the adequacy of a response rate, any survey must deal with the question of differences between respondents and non-respondents, and the question becomes a compelling one with a response rate under 50%. Fortunately, some limited amounts and kinds of data do exist which describe characteristics of the class of 1975 and against which the 340 respondents to this survey can be compared. Based on figures provided in Data Report # 15 from the BSC Office of Program Development and Research (1976: 18), the distribution of survey respondents by major field of study shows a very close correspondence to the paramteers reported for the entire group. When these figures are summarized by academic division (the sample is not large enough to admit breakdown by each major field, since some majors include as little as .1% of the student body), the sample for each division falls within 3% of known parameters. Humanities majors are somewhat underrepresented in the sample; natural science and education majors are slightly overrepresented; and social science and career program graduates have responded in almost exactly the proportions in which they exist in the total population. Figures by division are summarized in Table 1.1:

Table 1.1: Comparison of Divisional Breakdowns of Respondents to Proportions in the Total Population of 1975 Graduates

Division	Population Parameters	Respondent Percentages	
Natural Science (Biology, Math, Physical Sciences)	9%	10.4%	(35)
Humanities (English, History, Philosophy, Foreign Languages)	17%	14.2%	(48)
Social Sciences (Afro, Economics, Regional Studies, Political Science, Psychology, Sociology)	27%	26.9%	(91)
Education (Elementary, Physical Ed.)	39%	40.5%	(137)
Career Programs (Law Enf., Fire Science, Public Service, Med. Technology)	8%	8.0%	(27)

Table 1.2: NUMBERS RESPONDING, PERCENT OF SAMPLE, PERCENT OF GRADUATING CLASS

Major	N	Sample Percent	Population Percent	Sample to Population Ratio
Afro-American	1	.3	.4	.75
Biology	18	5.3	3.5	1.5
Economics	4	1.2	2.9	.4
Elementary Ed	104	30.8	29.4	1.0
English	29	8.6	7.2	1.2
Regional St.	19	5.6	2.8	2.0
History	18	5.3	6.9	.77
Law Enforcement	23	6.8	7.8	.9
Mathematics	11	3.3	3.9	.8
Natural Sciences	6	1.8	2.0	.9
Philosophy	1	.3	.9	.33
Physical Educ.	33	9.8	9.3	1.1
Political Sci.	21	6.2	5.7	1.1
Psychology	19	5.7	6.2	.9
Sociology	27	8.0	8.6	.9
Medical Tech.	3	.9	.5	1.8

Table 1.2 shows two majors, Biology and Regional Studies, overrepresented in the sample. Two majors, Economics and Philosophy, are also underrepresented. In all four cases, the majors which are disproportionately represented in the sample have small numbers of majors as their base and, consequently, they are the most difficult majors to proportionally reproduce by sampling of other than quota

or stratified approaches. Properly speaking, the study did not set out to sample; this subset of the entire population reflects self-selection by choosing to respond. The dangers of bias due to self-selection are somewhat mitigated by the above finding that no major department is greatly misrepresented in the final subset of cases which, for lack of a better term, I will refer to as "the sample."

The sample also seems to be fairly representative by gender. Two coders independently reviewed the list of 914 names of persons to whom questionnaires had been sent. In all but 2.5% of the cases, coders were able to judge the sex of persons listed by reference to their first names. The two coders agreed (within one tenth of a percent) that 52% of the unambiguous names denoted females and 48% denoted males. Among only respondents the sex ratio is also 52 to 48 in favor of females. Hence, on the two parameters whose appropriate distribution is known -- major field of study and gender -- the sample has proven quite representative.

SECTION II: THE SOCIAL AND FAMILY BACKGROUNDS AND PRE-COLLEGE EXPERIENCES OF 1975 GRADUATES

Family Background

Graduates most often described their family's socioeconomic standing as "working class" (56%). Most of the others identified themselves as coming from "middle class" families (41%), save for a handful who identified either with the "lower class" (2%) or the "upper class" (less than 1%):

Table 2.1: "Which of the following terms would you use to describe your family background?"

	N	Percent
Lower Class	7	2%
Working Class	190	56%
Middle Class	140	41%
Upper Class	2	.6%
	339	

When asked to estimate their parents' total income, graduates reported an average of $12,568 (median: $12,160). Nearly half (49%) reported that their parents' income totalled less than $12,000. Exactly half came from families whose income ranged from $10,000 to $15,000, while the other half was almost equally divided between family incomes of less than $10,000 (24%) and incomes over $15,000 (26%). Very few (6.5%) came from families with an income of $20,000 or more.

Not surprisingly, parents' income was closely related to graduates' perceptions of their family's class position. Although there was a good deal of overlap between the incomes of some of the families designated as working class and some of the families designated as middle

class, mean family income sharply distinguished the working class families ($10,757) from those who called themselves middle class ($15,344). As table 2.2 indicates, two thirds of the working class families had incomes estimated at less than $12,000; 89% had incomes under $15,000. Among those who considered their families middle class, only 24% had incomes under $12,000, while the vast majority (66%) had incomes between $12,000 and $20,000.

Table 2.2: Incomes for "Middle Class" vs. "Working Class" Families

Income Range	Middle	Working
Below 8,000	4.6%	16.9%
8,000 - 9,999	2.3	16.9
10,000 - 11,999	14.5	32.8
12,000 - 14,999	30.5	22.4
15,000 - 19,999	35.1	9.3
20,000 or more	13.0	1.6
cases:	131	183
Mean:	$15,344	$10,757

Fathers' occupations present another view of graduates' socio-economic background. Whereas nationwide figures for all college students indicate that about two thirds of college students come from white-collar homes, previous studies of BSC students have indicated a reversal of national norms; two thirds of BSC students come from blue-collar homes. Attrition of students through the four undergraduate years favors the survival of somewhat more affluent students and should be expected to modify these proportions somewhat in a sample of graduates.

Nevertheless, three out of every five (60%) of the respondents came from blue collar backgrounds. Of the rest, 23% listed their fathers in the ranks of professionals or managers; 17% indicated that their fathers were involved in either sales or clerical work. 44% indicated that their fathers did skilled, semi-skilled or unskilled manual labor, and 16% worked at low level service occupations.

When the occupations of graduates' fathers are broken down by subjective social class identification (table 2.3), it becomes apparent that occupation as well as income affects class identification. A large majority (61%) of those who label their families "middle class" have fathers who work in white-collar occupations or in professions. On the other hand, almost three out of every four (73%) of those who label their families "working class" have fathers occupied in blue-collar jobs. Clearly, then, the class distinction between those who work with their hands and those who work with their heads which previous research has found so deeply etched in the consciousness of the adult, male working class has been passed intact to another generation.*

Table 2.3: Occupations of Fathers of 1975 Graduates, by Social Class

Occupation	Middle Class	Working Class
Professional	22%	1%
Managerial	22	8
Sales	10	7
Clerical	7	12
Skilled	17	33
Semi-skilled	6	15
Laborers	4	7
Service	13	18
Cases:	n=140	n=183

* See, for example, Richard Sennett and Jonathan Cobb, The Hidden Injuries of Class (N.Y.: Random House, 1972)

Family Size

Most of BSC's graduates come from relatively large families. The average and modal number of children in the families of these graduates is four. Three fourths of all families included three or more children; one quarter included five or more. Statistics on family size are summarized in table 2.4:

Table 2.4: Number of Children in Family of Origin

Number of Children	Frequency	Percentage
1	14	4.2%
2	67	20.3%
3	66	20
4	76	22.4
5	31	9.4
6	37	11.2
7	18	5.5
8 or more	21	6.4
mean:	4.0	
mode:	4	

Parents' Education

The average number of years of education completed by the mothers and the fathers of BSC graduates were almost identical; mothers averaged 11.6 years while fathers averaged 11.8 years. There were, however, some interesting differences in the way these average values were dispersed through the two groups. Fathers were more likely than mothers to have dropped out of school before completing high school (27% vs. 23%), but they were also more likely to have received at least some college education (26% vs. 19%). Furthermore, fathers were twice as likely as mothers to have graduated with a four-year degree from college (10.2% vs. 5.1%) and three times as likely to have attended

graduate school (4.5% vs. 1.5%). Moreover, not only is the percentage of both mothers and fathers with any education beyond high school relatively small, but among these fortunate few with any training beyond high school the most common level of completion stands at 14 years, which may mean that the two years of training beyond high school were devoted to specialized business or technical training rather than to pursuit of a four-year degree.

Table 2.5: Mother's and Father's Education

Years Completed	Mother	Father
fewer than 8	5%	6%
8	5	7
9 to 11	13.5	14.5
12	58	46
13	4	4
14	8	9
15	2	3
16	4	6
17 or more	1.5	4.5
	n=333	n=331

Most of the respondents (82%) indicated that they were among the first generation in their respective families to attend college. These were about equally divided between those who were themselves the first to attend (51%) and those who had been preceded by an older sibling (49%). These figures are somewhat higher than expected, given the number of respondents who indicated that their parents had completed some education beyond high school. Apparently, some of these graduates whose parents had obtained limited postsecondary training viewed their parents pursuits as non-collegiate. This reinforces the inference made above that a portion of the parental education described in table 2.5

was of a strictly technical sort.

Parents' Employment

92% of the sample indicated that, through most of their lives, their fathers had been steadily employed at one basic sort of work. Another 3% had fathers who had been employed steadily but often had to shift from one job to another. 46% (a figure somewhat higher than the national average of 40%) of the respondent's mothers were also employed: 27% were employed part-time; 19%, full-time.

Table 2.6: Father's Occupation (in order of prevalence)

Occupation	#	Percentage
Skilled Workers	87	26%
Service	52	16
Managerial	45	14
Semi-skilled	38	11
Professional	33	10
Clerical	31	9
Sales	26	8
Unskilled Labor	21	6
	n=333	

The eight summary occupational categories listed above include 144 different occupations pursued by the fathers of respondents. "Skilled workers," who comprised the largest category, consisted mostly of machinists (13), foremen (10), auto mechanics (5) and tool and die makers (5). "Service workers" were usually policemen (16), firemen (12), janitors (9) or bartenders (5) -- a quite varied lot captured in the census' most amorphous category. "Managers" were usually employed in small enterprises, such as cafeterias, bars, neighborhood stores, and the like, but this latter category also included a number of inspectors

of various types. The "semi-skilled workers" were made up primarily of truck drivers (12) with a sprinkling of welders (3), taxi drivers (3) and gas station attendants (3). The "professionals" were a very varied lot -- small in number and quite diverse: lawyers (4), accountants (4), draftsmen (3), electrical engineers (2), high school teachers (2) and high school counselors (2). The majority of those categorized as "clerical workers" were either postal clerks or mail carriers (12). No specific positions predominated among either sales workers or laborers.

Other Characteristics of Family Background

The vast majority of respondents indicated that they had been raised by both parents (90%), but some had been raised by only one parent (6% by their mothers; 2% by their fathers), and a few had been raised by other relatives or by foster parents (3%).

Most of the respondents (79%) said they had grown up in neighborhoods where the average income was quite similar to that of their own family. The rest were about equally divided between families above and families below the economic levels of their neighborhoods.

Parental Attitudes

All but four of the respondents declared that their parents had been favorably inclined toward having their offspring attend college. However, since more than four fifths of these parents had not themselves attended college, it is at least conceivable that their general supportiveness might at times have given way to tension or conflict over one issue or another during those years of college attendance.

In their own lives these parents had mostly gone to work directly

after high school (if not earlier), and they had probably done so during the 1930's or 1940's when their own families needed the income their leaving school would produce. Many, perhaps, had enjoyed and performed well in school but found themselves forced by circumstances to terminate their own education; this would explain why 52% of the graduates said their parents envied their opportunity to attend college. Additionally, most parents had seen a good number of their age-peers rise in status and income, due in no small part to their having availed themselves of G.I. educational benefits. Hence, their generally favorable attitude toward their children's college attendance probably represents a melange of sometimes contradictory impressions, emotions, motives and misunderstandings. Envy combined with identification, hopes for their chidren's future alongside the exigencies of and expectations for the present, can produce an atmosphere of tension and ambiguity within the household.

The sentiments of first-generation college parents as portrayed above, if they are accurate, are of particular relevance to BSC students because so many of them spend their college years at home. Although 13% of the 1975 graduates were married and living with their spouses, of the rest only 12% spent their BSC years separated from their parents. The other 88% lived at home, and a small portion of these (one in ten) decided to move out at some point during their college careers. Since the overwhelming majority of BSC students are known to live with their parents, a number of questions were framed to identify the kinds of problems that might arise at home.

The most common complaint among these graduates was that their parents had interfered in their personal lives(56%). Many (51%) added

that, in some ways, their parents did not seem to understand what college was all about. Nearly half (48%) said their parents did not always treat them as adults or felt that their parents had interfered with or not respected their independence(43%). Nearly a third complained that their parents had failed to provide support and encouragement (32%) or that they had manifested a dislike for the ideas promoted in college (26%). Some had perceived in their parents an apparent distrust of college-educated persons (16%). Respondents were much more likely to indicate that these negative sentiments were "partially true" of their parents rather than "entirely true," which may mean that the sentiments attributed by respondents to their parents reflected a general underlying attitude rather than a constant and overt behavioral pattern. Perhaps as a parental response to ambiguous feelings about having a son or a daughter living at home after high school with no substantial income for either self-support or helping out, 61% of the respondents said that their parents expected them to be financially independent, and 85% of the respondents expressed their own desire to be independent of their parents.

Talcott Parsons has described the norm of college-going as "virtually ascribed for the middle class." The data above suggest that there exists a similar high level of support in at least some segments of the working class for sending a son or a daughter to college, but that this general supportiveness comes into conflict with traditional definitions of when a son or a daughter is to be considered "grown up" and what that grown-upness ought to entail. At an age when most of these graduates' parents had already undertaken support of themselves and perhaps their families, this generation

remained largely non-supporting and dependent. Viewed from the student's perspective, parents' expectations present themselves as contradictory demands; at one and the same timehe is expected to devote four or five years of his life to study, yet he is often (sometimes subliminally) encouraged to support himself and is accorded or denied the full prerogatives of adulthood in proportion to his ability to provide that self-support.

Demographic Characteristics of the Sample

Age

At the time of their graduation, 60% of the respondents ranged in age from 21 to 23. Most of these, I suspect, were students who began their college careers immediately after high school. Many went directly from high school to BSC and then took either four or five years to complete a baccalaureate program. Others began their college education elsewhere and transferred to BSC . Of the rest of the sample, nearly a third of all respondents ranged in age from 24 to 29, and another 9% were 30 or older.

Sex

52% of the respondents were female and 48% were male.

Race

Most of the respondents (94.6%) were Caucasian. Because only 5% of the sample belong to a racial minority, it will not be possible to seriously analyze potential racial differences in academic or career outcomes.

Veterans

12% of the responding graduates identified themselves as veterans of the Armed Services.

Experiences Prior To College

As table 2.7 indicates, 53% of the respondents entered college directly from high school. At least 20% were latecomers to college, entering after having served in the military (6%), after having worked for a while (12%), or after having raised a family (2%). Another 27% came to BSC as transfers from another college. The majority of these (13%) came from Massachusetts Community Colleges; 8% came from private colleges; and 7% transferred either from the University of Massachusetts or from another Massachusetts State College. It is highly likely that some of these transfers entered their previous colleges after similar work experiences or military service had intervened between high school and college. This would help to explain why 40% of the respondents were 24 or older at graduation.

Table 2.7: Status Prior to Entering BSC

Entered:	#	Percentage
from high school	167	53%
from the military	20	6
from working	38	12
after raising a family	5	2
from a community college	40	13
from U. of Mass.	8	2%
from another State College	14	4%
from a private college	25	8%
	n=317	

Nearly a third of the sample (30%) also indicated that they had experienced some sort of interruption of their studies between entry and graduation which had kept them out of school for a year or more. The reasons given for these interruptions were (in order of their frequency): general disillusionment (33%), lack of money (28%), illness (19%), military service (7%), low grades (7%) and marriage (6%).

High School Preparation

Graduates were asked to rate the academic quality of their high schools. So extremely subjective a measure is diffucult to interpret in any definitive way, since it is unclear on what basis respondents might have made these judgments. If they based their ratings on how academically prepared for college they felt in comparison to their peers at BSC, then the objective correlates of their judgments would seem to depend primarily on the mix of students to whom they were exposed during college. Academic reputation partially homogenizes the kind of student clientele a school attracts, and admissions standards, if selective, further homogenize the range of preparedness within the student body. Thus, if peers are truly one's reference point, any college's student body might be expected to cluster around a modal judgment of their previous academic backgrounds that corresponded roughly to the known reputation of the college. In the case of BSC, graduates most often rated their high schools as "average." (40%)

Interestingly, nearly half (47%) of the respondents referred to their high schools as either "above average" (30%) or"excellent" (17%). Relatively few (13%) felt their high school preparation had been "below average" (10%) or "seriously deficient" (3%). This suggests that a substantial number of well prepared, above average students are attracted to and attend BSC for reasons other than its "average" academic reputation. It may be further speculated that "above average" students most often come to BSC because they lack the financial resources to attend the many neighboring schools that combine higher academic standing with much higher overall costs.

Based on self-reports, 85% of the graduates claim to have ranked in the upper half of their high school graduating classes. 54%

ranked in the top quarter of their classes, and 22% placed themselves in the upper tenth. Scores on the verbal S.A.T. ranged from 401 to 600 for 70% of the graduates, with a mean score of 481. Scores on the Mathematics S.A.T. fell within the same range for 70% of the respondents with a mean value of 478. Fewer than 5% reproted verbal or math scores of 650 or higher.

Graduates were asked to estimate the proportions of (a) their high school graduating classes and (b) their personal friends who had gone on to college. Table 2.8 suggests that the percentage of one's personal friends who attend college tends to be higher than the percentage of one's general high school classmates who do the same. Whereas only 15% of the graduates stated that more than 75% of their high school class attended college, 55% said that three quarters or more of their high school friends continued their education. This pattern is congruent with the frequent finding that the college-going proclivities of one's peers are a significant influence on one's own decision whether or not to pursue college.

Table 2.8: High School Classmates and Friends Attending College

Classmates		Friends	
less than 25%	15%	very few	20%
25 - 50%	37%	one quarter	12%
50 - 75%	30%	one half	14%
more than 75%	18%	three quarters	19%
		almost all	36%

Not only were the majority of graduates' high school friends likely to attend college, but BSC students kept in closer touch with precisely those friends who did attend college. Excluding the roughly one third who maintained virtually no contact with high school peers, 46% of those who did socialize with former high school friends did so

their contacts were mostly with those who had not continued their education, and 44$ socialized with an equal mix of the two groups.

The Choice of Boston State

Most graduates had decided to attend college either before high school (36%) or during high school (45%) — and usually before the senior year for the latter group. Besides applying to BSC, respondents applied to an average of 2.0 other colleges and received an average of 1.6 acceptances. 18% applied only to BSC, and another 8% were rejected wherever else they had applied; so, 26% chose between attending BSC and foregoing college. The rest -- almost three quarters of all graduates — chose BSC over alternative colleges.

Table 2.9: Number of Other Colleges Applied to

Number of Applications	#	Percentage
no other colleges	56	18%
one to three others	216	68%
four or more others	45	14%
	n=317	

63% of these applications and 62% of all acceptances were at public universities, colleges or junior colleges in Massachusetts. The University of Massachusetts at Boston, which had not yet moved to its new Columbia Point location when most of these applications were placed, received more applications than any other school -- public or private -- from students who would choose eventually to attend BSC, and 78% of these applicants were accepted by U. Mass. Northeastern University ranks second in popularity among competing institutions. Salem State College ranks next, followed by Boston College, the University of

Massachusetts at Amherst, Boston and Suffolk Universities, and Bridgewater State College. No other school attracted the attention of more than 5% of the students who would graduate from BSC in 1975. Figures summarizing the popularity of all colleges to which five or more 1975 BSC graduates had applied (and the "popularity" of BSC students at these institutions) appear in table 2.10.

Table 2.10: Applications and Acceptances of 1975 BSC Graduates to Other Colleges

Institution	Total Applicants	# Accepted	Percent Accepted
U. of Mass.,Boston	72	56	78%
Northeastern	63	49	78
Salem State	49	40	82
U. of Mass.,Amherst	29	23	79
Boston College	27	26	96
Bridgewater State	25	17	68
Boston University	23	19	83
Suffolk	21	20	95
Mass. Bay C.C.	17	16	94
Framingham State	14	13	93
Lowell State	11	10	91
Fitchburg State	9	6	67
Quincy Jr. College	8	8	100
Westfield State	6	4	67
Emmanuel College	5	4	80
	379	311	82%

Several things seem noteworthy about the applications and acceptances to other colleges of eventual BSC graduates. First, a greater proportion of the applications to private schools were favorably acted upon (85%) than applications to public institutions (80%). However, this small difference of 5% merits little attention, since the social desirability of claiming to have been accepted at private schools more prestigious than one's alma mater might well have inflated the truth to this degree. Secondly, applications to universities more often

91% of the applications to the four most expensive private institutions (B.C., B.U., Suffolk, Emmanuel) resulted in acceptances. These three regularities suggest that a significant number of the students who decide to attend BSC had been judged quite capable by more prestigious institutions in the area, but they lacked the financial resources to attend a private college or university.

Of the 15 institutions listed in table 2.10, eleven are located in the Greater Boston area. The four outside greater Boston (U. Mass.-Amherst, Bridgewater State, Fitchburg State, Westfield State) are all public institutions to which applicants to BSC can apply without additional charge by the State; hence, some of these applications may have been submitted without serious intent. Moreover, the pattern of institutions mentioned clearly suggests a conscious decision to attend college as a commuter. The vast majority of students at BSC commute; had they chosen one of their alternative colleges, they would probably still have commuted from home. This further illustrates the previously mentioned financial restrictions under which most BSC students operate.

Most of the respondents (93%) stated that, had BSC not existed, they would have pursued a college education elsewhere -- most often at another state college or at U. of Mass.-Boston. Relatively few (7%) indicated that they would have gone to work or would have continued in the job they held before entering college.

When the respondents were asked to indicate their <u>two</u> principal reasons for choosing BSC over other institutions, four factors emerged in the following order of importance: low cost (86%); accessibility (46%); specific courses of study which the respondent planned to pursue (33%) (most commonly education or law enforcement); and attachment to

the local area, home and friends (23%). Over two thirds (68%) mentioned the low cost of attending BSC as their primary criterion for choosing BSC over alternatives. Nearly half (42%) mentioned the accessibility of the campus as their second reason for choosing BSC. In general, the higher one's class rank was in high school, the more likely one was to choose BSC because of its low cost. This is true for all groups except those who ranked in the bottom 25% of their high school classes (only 4% of graduates). The latter group is most likely made up of hardship cases from especially poor socioeconomic areas who entered the college through the "flexible admissions" program designed for inner-city youths who would otherwise find it impossible to gain entry to college. The same type of relationship holds between high school rank and choosing BSC primarily for the sake of a specific program (see table 2.12).

Table 2.12: High School Class Rank and First Reason for Choosing BSC

High School Rank	Percent Specifying "low cost"	Percent Specifying a Program of Study
upper tenth	70%	25%
upper quartile	67%	20%
upper half	67%	17%
percentiles 51-75	60%	9%
lowest 25%	73%	18%

107 graduates mentioned that they had initially chosen BSC in order to pursue a specific program; about 45% of these mentioned a specific program as their primary reason for having chosen BSC and the rest (55%) listed a program as their second consideration in choosing BSC. Most of these students (52%) specified "Education" (elementary or secondary) as the program that had attracted them. Another 17% had been drawn by the Physical Education program. 16% came to pursue

a major in law enforcement; and 15% specified interests in other programs or majors. Moreover, it is noteworthythat, when a specific program was mentioned, the other reason most commonly mentioned (75% of the time) was the low cost of attending.

Evening Students

Nearly all the graduates entered the college as full-time students (95%), while the rest entered as part-timers in the Evening Undergraduate College (EUC). 15% began their student careers as EUC students (two thirds of these on a full-time basis), and a little more than a third of these finished in the day program. Hence, EUC had a net transfer effect of adding about 6% to the number of graduating seniors enrolled in the day program.

Parental Feelings about College Attendance

Only four students reported parental opposition to their decision to attend college. Nearly half (48%) reported an essentially laissez-faire attitude on their parent's part; 45% felt positive encouragement; and 6% felt they had been pressured to attend college by their parents. Among those whose parents had encouraged them, 57% said both parents had provided about equal encouragement, 16% had received encouragement mainly from their fathers, and 27% had received most encouragement from their mothers.

One third of the respondents had not consulted their parents about the choice of a specific college. Of those who did, three quarters reported that their parents either had suggested BSC or were pleased with the choice; one quarter said their parents would have preferred some other choice, and two stated that their parents could not agree between themselves.

SECTION III: THE STUDENT CAREER -- EXPECTATIONS, CONTINGENCIES, EXPERIENCES AND EVALUATIONS

Socioeconomic Expectations

More than half (56%) of the graduates reported coming to college in the full expectation that a college degree would raise their socioeconomic standing above that of their parents. Another 30% thought a college degree might raise their socioeconomic standing, and only 15% did not expect any socioeconomic impact (perhaps some of them expected a decline).

One year after graduation only 35% still felt that their degree would translate into dollars; another 36% had their doubts but still had hope; 29% expected no socioeconomic improvement to be forthcoming -- a marked increase in the number resigned to education merely for its own sake. (The entire topic of lowered expectations after college will be discussed in more detail later.)

Knowledge vs. Credentials

At entry, 44% of the graduates stated, their main emphasis was on "acquiring knowledge and learning of new ideas and views," whereas 56% indicated that they had placed chief importance on "getting the training and certification for a career." There was no difference between these two groups in the extent to which they felt college would improve their socioeconomic standing. Older students were least likely to be career-oriented, partly because a number of these students already had settled careers, had returned to school either to improve their standing within that career or simply to enjoy learning, and generally had more freedom to experience a college education on its

own terms without fretting over its future, pragmatic rewards. Males who were among the first generation in their families to attend college were much more likely to be knowledge-oriented than either males with college-going antecedents in their families or females irrespective of their family's college history. This may be related to the facts that: (a) students pressured by their parents in various ways while living at home tend to emphasize credentials and careerism over the pursuit of knowledge; and (b) those with superior academic standing in high school tend to be oriented more toward knowledge than toward careerism. I would hypothesize the following connection.

Families who send a daughter to BSC generally expect her to become a teacher and, hence, the emphasis among women graduates on careerism at entry to college. Families without college antecedents probably send their sons to BSC when those sons have shown academic promise in high school. For these families, having a son at BSC is a source of pride and perhaps a sign of the family's development and success. The promising son is given a supportive environment at home, and he tends to pursue knowledge out of enjoyment without worrying terribly much about his future career. For families with a prior history among parents (and perhaps among grandparents) of attending college, sending a son to BSC might well seem a kind of failure. Perhaps it has come to this because the son has disappointed all in high school. The family tends to pressure the son at home, interferes in his life, and pushes him to think more about a career so that his future will not turn out to be an embarassment to the family.

Table 3.1: Orientation toward Knowledge vs. Credentials at Entry, by Sex and by Family's College History

Gender and Family's College History	Percent Oriented toward Knowledge	Percent Oriented toward Credentials
Females		
First Generation	38% (53)	62% (85)
Antecedents	37% (11)	63% (19)
Males		
First Generation	54% (68)	46% (58)
Antecedents	36% (9)	64% (16)

(numbers of cases are represented in parentheses)

Table 3.2: Orientation toward Knowledge vs. Credentials at Entry, by Rank in High School Class

High School Rank	Knowledge Orientation	Credentials Orientation
upper tenth	48%	52%
percentiles 11-25	47%	53%
percentiles 26-50	43%	57%
percentiles 51-75	27%	73%
bottom 25%	22%	78%

Table 3.3: Effects of Parental Treatment on Orientation toward Knowledge vs. Orientation toward Credentials

Did Parents treat you as an adult?	Knowledge Orientation	Credentials Orientation
Yes	52%	48%
Sometimes	38%	62%
No	23%	77%

Residence

Geographical dispersion, on the one hand, and relative institutional parity and interchangeability, on the other, have combined to make the state colleges especially attractive and available to able students who generally cannot afford the higher costs of residence at college. Most students throughout the system are commuters of local origin and upbringing, and this is especially true at Boston State -- the only institution with absolutely no facilities for resident students. It is not surprising, therefore, to find that more than two thirds of the respondents (69%) lived with their parents throughout their college years; another 8% had lived at home initially but moved out at some point during their college years. A significant proportion of the 1975 graduates (13%) were married students living with their spouse and children. Only 10% of all respondents were living away from home, presumably in local apartments.

A review of the relationship between residence and the attitudes of parents toward college and toward their college student children indicates two patterns. First, those who chose to live away from home portrayed their parents as having been more negative toward college attendance than did students living away from home. Students living away from home were 10% more likely to say their parents "highly valued" college; they were 10% less likely to say their parents felt college was "the way to get ahead;" and they more often said that their parents didn't understand college, distrusted people who had been to college, disliked the ideas promoted in college, and were more than twice as likely to have opposed the decision to attend BSC. Such students, then started their college careers in a much more hostile relationship to their parents than did others, and this probably has

a good deal to do with their decisions to move out of the house.

Secondly, living away from home seemed to reduce frictions between parent and student below the level usually experienced by those who remained at home. Those who lived away from home more often claimed that their parents treated them as adults, were supportive and encouraging, and stayed out of their personal lives.

Not surprisingly, the major distinctions between those students who live at home and those away from home are age and sex differences. Students living away from home are most commonly drawn from the (relatively small) 24 to 29 age group, and they are more often males (66%) than females even though there were more women in the sample than men. They are also more than twice as likely as other students to hold full-time jobs while attending school -- no doubt to support their higher living expenses.

The concerns of students living away from home also differed from those of their locally rooted peers. They worked longer hours at jobs, made more money, but still they worried somewhat more about meeting expenses. They were somewhat more concerned about keeping up with coursework and maintaining their academic interest, and somewhat less concerned about the difficulties of meeting new people. They wrestled a good deal more with the impact of new ideas on their own personal values. Finally, they were much less concerned with what they would do after graduation and with whether or not they might find a job -- perhaps because their stronger ties to jobs and income while students promised more hope for the future.

Work and Study

Most of the graduates (94%) reported that they held jobs while attending college. The number of hours worked per week averaged 22.8, with half of the students working between 15 and 24 hours and about a third (31%) working even longer hours. 14% of the students were working full-time. Grades tended to decline as the number of hours worked per week increased (r= -.14)*, except for one group. The grades earned by persons working full-time were comparable to grades of those who worked far fewer hours, suggesting a high level of motivation among those both working and attending college on a full-time basis.

Although students worked almost 23 hours a week on average, their mean (in more than one sense) take-home pay amounted to only $61.75, and seven out of every ten made less than this amount (the pay distribution is highly skewed). The median take-home pay, a figure more typical of the distribution in this case, was only $46.00.

Despite the generally low levels of student earnings, 62% of the respondents reported that their parents expected them to be financially independent. A majority of the respondents (85%) said that they wanted to maintain finincial independence from their parents, but more than two thirds (68%) reported worrying about the problem of supporting themselves.

Only one in five (20%) considered their parents to be their principal source of financial support. Most (95%) indicated that

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* All correlations presented in this report will be Pearson Product-Moment Correlations, unless otherwise stated.

their own earnings had been important, and the majority (55%) said that their own earnings constituted their prime source of support. Although nearly a third (29%) indicated that they had received some form of scholarship or grant of financial aid, the majority of these "grants" were identical with their jobs -- i.e., they were students employed through the College Work-Study program. Another 20% of the respondents had relied on loans to cover a portion of their expenses, and 13% of them had received veteran's benefits for attending college. Finally, spouses contributed to the support of 6% of the graduates -- roughly half of those married.

Duration of College Careers

In many ways the stereotypical career pattern that portrays a smooth and uninterrupted movement from high school to college to job and/or family does not apply very well to BSC students. Not only do many come to BSC after an extended hiatus in their academic progression, but nearly half of 1975 graduates (47%) then took more than four years to get their degrees. Among these 47%, the average time-length cited was 5.75 years. Of those who had entered college directly from high school, three fourths (72%) managed to finish in four years, compared to only 46% of those who had entered college after having worked, served in the military, or raised a family. Only 27% of transfer students managed to complete their degree in four years, with a five year span much more typical (38%) for this group. Of those

who managed to avoid interruptions to their college careers, 72% finished in four years. Those whose student years were interrupted, on the other hand, took an average of 5.9 years to complete their baccalaureate programs.

Concerns During the Student Years

Table 3.4: Problems and Concerns During the Student Years

Type of Concern:	No Problem	A Problem	Serious Problem
Covering expenses	32%	42%	25%
Postgraduate employment	17	25	58
What to do after grad.	24	35	42
Keeping up with courses	35	46	19
Meeting new people	61	33	6
Problems at home	62	26	12
New ideas vs. own values	42	45	13
Maintain academic interest	38	49	12

In order to identify the kinds of problems and difficulties that might have afflicted students during their college years, graduates were probed about the seriousness of several areas of potential concern. As table 3.4 shows, "postgraduate plans and employment" was the only one of these concerns which struck a majority ofstudents as quite serious. "Covering expenses" was perceived as a concern by two thirds of the students, and 25% considered it to have been a serious problem. Maintaining academic performance, sustaining interest in academic pursuits, and coping with new ideas and values also constituted problems, but of a less serious nature. Problems at home were seen by the fewest number of students to have been serious concerns.

Academic Achievements

Graduates responding to the survey reported a mean grade point average of 3.15 (on a four point scale). Nearly two thirds (64%) reported a G.P.A. of 3.0 (B) or better, and only a few (3%) graduated with grades under 2.5. A majority (51%) considered their grades to have been comparable to what they had expected when they came to college, while 37% received grades higher than they had originally anticipated, and only 12% made lower grades than they had expected. These findings suggest that the two thirds (65%) of graduates who indicated they had considered "keeping up with coursework" a matter of concern were probably manifesting their own seriousness of purpose rather than hinting at academic difficulties.

Nearly half of the respondents (42%) said that they had learned more in college than they had expected to learn. Only 17% felt that they had learned less than what they had expected.

Women achieved grades (3.2) slightly higher than those of men (3.0). Curiously, grades showed no marked relationship to the ratings students gave to their high schools. Those who labeled their high schools "excellent" received average grades of 3.2, while those at the other end of the spectrum who considered their high schools to be "seriously deficient" nonetheless managed to average 3.0. All groups in between these two extremes averaged almost identical grades of 3.1. However, rank in one's high school class did turn out to be at least somewhat predictive of grades in college, even if the perceived quality of the secondary institution proved irrelevant. Those who ranked in the upper tenth of their high school classes received grades averaging 3.4 at BSC. College grades slowly declined, until the last group (those

ranking in the bottom quartile of their respective high schools) received grades in college averaging only 2.2. Ability, insofar as it is measured by S.A.T. scores, had only a slight effect on grades. Verbal S.A.T. scores proved irrelevant within the range that prevailed in this population, while math S.A.T. scores did exhibit a modest connection to grades (r= .16). The most significant predictors of grade point average were the indices of personal "investment" in college. Heavy investments of time (r= .24), effort (r= .32) and emotional involvement in college (r= .24) all led to higher grades. The fewer hours per week a student spent at a job, the higher his or her grades. This suggests a conflict between academic commitments and the need to support oneself; those students least burdened with the need to look after their own financial circumstances got better grades -- probably because they had the freedom to devote greater amounts of time and attention to their studies.

Table 3.5: Grades by Types and Amounts of Self-Investment in College
--- percentage receiving grades of 3.4 or higher ---

Amount of Investment	Types of Investment: Time	Effort	Emotional
Heavy	37%	46%	39%
Moderate	17%	13%	18%
Low or None	17%	11%	10%

Academic Expectations

Nearly two thirds of the graduates (65%) came to BSC expecting the coursework on which they were about to embark to be relatively difficult. Interestingly, the majority of all graduates (58%), and the majority (53%) even of those who came expecting it to be difficult,

completed their student years feeling that the academic side of college life had been relatively easy. Women started out a bit more likely (6%) than men to expect academic rigor and travail, but they left slightly more often than men (5%) feeling it had been easy. Veterans also experienced something of a surprise. Whereas veterans were 20% more likely to come expecting their studies to be untaxing, they were 45% more likely than non-veterans to leave saying things had indeed been demanding. Apparently the attractiveness of G.I. benefits leads a good number of veterans to embark on an academic path whose seriousness they have not adequately considered or have not fully grasped. However, their surprise at coursework's difficulty notwithstanding, veterans perform as well as other groups.

Table 3.6: Entering Expectations and Exiting Evaluations of Coursework Difficulty, by Rating of High School Quality

High School Rating	Expectations		Evaluations	
	Easy	Difficult	Easy	Difficult
Excellent	48%	52%	62%	38%
Above Average	37%	63%	54%	46%
Average	28%	72%	59%	41%
Below Average	36%	64%	58%	42%
Seriously Deficient	40%	60%	60%	40%

Entering Expectations about the probable difficulty of coursework showed a curious, curvilinear relationship to ratings of the quality of one's high school and to rank in one's high school class. As table 3.6 shows quite clearly, those who rated their high school either "excellent" or "seriously deficient" were much more likely than others between these two extremes both to come expecting easy coursework

and to leave feeling it had been easy. The same curvilinearity applies to rank in class as it affects entering expectations (table 3.7). Those who did either quite well or quite poorly in high school enter BSC expecting an easy path through academe, though no similar discernible pattern prevails among their evaluations of actual coursework difficulty as they found it.

Table 3.7: Entering Expectations of Coursework Difficulty by Rank in High School Class

Rank in Class (percentiles)	Expectations: Easy	Difficult
Upper 10%	42%	58%
11 - 25	38%	62%
26 - 50	26%	74%
51 - 75	36%	64%
lowest 25%	50%	50%

Based on the above, I am tempted to speculate that BSC appeals to two different clienteles for quite different reasons. Those who come from quality secondary institutions and come after having excelled among their peers probably are not motivated by the easy coursework they anticipate; they probably come because they cannot afford to attend elsewhere or because they are particularly attracted by a specific program. Those who, on the other hand, come both from a personal history of questionable academic performance and a set of soul-destroying experiences with second-rate institutions which, by their own accounts, have ill prepared them for college, probably take comfort in the happy expectation that BSC is unlikely to overly tax their uncertain capacities. Moreover, those who share an expectation about BSC do not necessarily share a common interpretation of that per-

ception: to some it may appear a blessing; to others, a misfortune.

Evaluation of Teaching

Four out of every five graduates rated the quality of teaching done at BSC as "good." Additionally, 15% rated the teaching to which they had been exposed as "excellent," and 6% considered it "poor." Most (57%) found the quality of education at BSC to be about as they had anticipated. Among the rest, those who found their BSC education to have been better than they had expected outnumbered the disappointed by two to one.

Graduates were also asked to rate their satisfaction with the "total experience of attending BSC." 37% said they were "very satisfied," 44% were "somewhat satisfied," 16% were "somewhat dissatisfied," and only 2% were "very dissatisfied." The sense of this measure is somewhat clarified by the further observation that three quarters (75%) of those who said they were "very satisfied" with the total experience had previously stated that they had "learned more than expected" whereas, in contrast, 86% of the "very dissatisfied" stated they had learned less than anticipated (gamma = .76).

The above three measures -- general satisfaction, whether more or less was learned than expected, and the overall quality of the education received -- can be used to specify in what areas BSC seems, in the eyes of its graduates, to be accomplishing its academic objectives most and least effectively. Cross-tabulating these three indices by major field of study yields a ranking of departments.

Such a ranking, however, should be interpreted with due caution. Literally speaking, the indices reflect, each in its own way, how well the students in specific departments feel their academic needs were met. Though this probably reflects strongly the extent to which the department is meeting its students' needs, no department services all the needs of its students; in fact, a majority of courses are always taken outside of the department. Furthermore, it would be presumptuous to assume that the impact and quality of courses taken outside one's department are equal for students from every area. It is at least conceivable that either the satisfaction or the disappointment expressed by one or another group of majors may, in some cases reflect on their major while, in other cases, reflecting on the quality of ancillary but necessary services rendered by other departments. The above qualifications notwithstanding, it is nonetheless interesting and instructive to examine the differential satisfaction of various groups of student majors to identify areas where the college is providing well or poorly for its students.

Table 3.8: Three Indices of Academic Satisfaction, by Major Field of Study (percentage giving most positive response)

Department	INDEX I: Learned more than expected	INDEX II: Education better than expected	INDEX III: Very satisfied, overall
Biology	59%	43%	44%
Sociology	56	40	52
English	48	35	38
Psychology	47	50	21
Physical Ed.	44	14	25
Elementary Ed.	42	22	39
History	39	11	28
Regional Studies	37	38	42
Political Science	33	33	33
Law Enforcement	27	30	32
Mathematics	9	36	36

Table 3.8 ranks departments according to the percentage of majors giving favorable or highly favorable responses on each of the three indices. Only those departments with 15 or more majors representing them were included in this analysis. An exception is made for the Mathematics department; it is represented by only 11 majors, but I decided to include it subject to the understanding that its rankings are a bit less statistically reliable than those of other departments.

Table 3.9 summarizes the rankings received by each department on each of the three indices and computes an overall, average ranking:

Table 3.9: Ranking of Individual Departments on Three Satisfaction Indices and Summary Ranking

Department	Index I	Index II	Index III	Rank Sum	Final Ranking
Biology	1	2	2	5	1
Sociology	2	3	1	6	2
English	3	6	5	14	3
Regional Studies	8	4	3	15	4
Psychology	4	1	11	16	5
Elementary Educ.	6	9	4	19	6
Mathematics	11	5	6	22	7
Political Science	9	7	7	23	8
Physical Educ.	5	10	10	25	9
Law Enforcement	10	8	8	26	10
History	7	11	9	27	11

Finally, table 3.10 summarizes the degree of satisfaction expressed in each division of the college.

Table 3.10: Percentages of Most Favorable Responses Given by Majors in Each Division, with Ranks and Rank Summary

Division	Index I	Index II	Index III	Rank Sum	Final Ranking
Career Programs	27% - 5	29%-3	32%-5	13	5
Education	42%-3	20%-5	36%-3	11	4
Sciences	38%-4	37%-2	46%-1	7	2
Social Science	43%-2	39%-1	37%-2	5	1
Humanities	46%-1	27%-4	35%-4	9	3

Satisfaction levels were highest in the Social Science fields, followed in order by the Physical Sciences, the Humanities, Education and the Career Programs. The reasons behind satisfaction or dissatisfaction are difficult to determine without further probing, but a fairly clear pattern among the divisions does seem to emerge. Social Sciences and Physical Sciences, the two divisions deemed most satisfying by 1975 graduates, are fields deeply rooted in the liberal arts tradition yet simultaneously relevant to existing careers. Hence, students concerned about both intellectual awakening and future employment can find a measure of satisfaction in both respects within these curricula which wed the intellectual and the theoretical with the practical. Education and special career programs, those fields yielding the least satisfaction to 1975 graduates, emphasize special skills and training for the sake of employment. Hence, it is not surprising that they rank lowest on indices to probe the quality of teaching and learning per se. The humanities stand as intermediary between high and

low levels of satisfaction. This ranking, rather than signifying anything substantive and interpretable about the division, reflects wide deviations from one department to the next within the division in the levels of satisfaction expressed by student majors after their graduation.

Attitudes of Students and Professors

The respondents' perceptions of faculty attitudes toward them and toward the school were varied but generally encouraging: four of five graduates (78%) felt that professors' attitudes toward them were basically positive (28% felt they were very positive); of the remainder, 19% felt professors were indifferent toward their students, and 3% felt that professors held negative views of students.

In assessing the feelings of their fellow students, 1975 graduates divided almost equally between those who felt their peers held positive feelings for their school and those who felt that the orientation of their peers was negative. Some (20%) went so far as to agree that other students were, in general, dominated by an inferiority complex regarding their college, while only 5% felt that BSC students showed pride in their institution. This squares with the earlier finding that 43% of the graduates characterized the colleges which most of their friends attended as "more prestigious" than BSC, but it contradicts the fairly high levels of specific and overall satisfaction which these graduates personally express toward the education they have just completed. There is a hiatus here, I suspect, moreso than a contradiction. On the one hand, students do seem sensitive to the

fairly low status accorded their institution in an area dominated by very prestigious colleges and universities, and this sensitivity does seem , by all accounts, to affect the mood of the student body. On the other hand, however, most feel rather highly satisfied in general with the quality of the education they received, and a good number report that the reality of BSC has exceeded the expectations they brought with them at entry. I suspect this is a manifestation of a more general phenomenon afflicting most of the Boston area institutions, residing as they do under the awesome reputational (and financial) shadows of Harvard and M.I.T.

Students evidently felt that their professors were less infected with an academic inferiority complex than were their peers. Whereas graduates rated the institutional orientation of their fellows as positive only 50% of the time, they were considerably more likely (77%) to judge the attitudes of their professors as positive. Only 22% felt that their professors showed signs of dissatisfaction with BSC.

Student ratings of the teaching performance of professors as excellent, good or poor -- the only available index of teaching quality -- unfortunately did not prove to be a very sensitive measure. With four out of every five graduates offering identical responses -- i.e., that the quality of teaching was "good" -- there remains little meaningful variation to seek out and analyze. When ratings are broken down by division, for example, differences between divisions were too slight to merit serious attention. Differences between individual departments, on the whole, were also relatively small. However, I present these differences in table 3.11 as limited but somewhat helpful guides to the teaching strengths and weaknesses current in the college.

Table 3.11: Percentage of Students Characterizing Teaching Quality as "Excellent" or "Poor" broken down by Department

Department	% Excellent	% Poor	Difference	Rank
English	24%	3%	21%	1
Biology	17	0	17	2
Sociology	15	0	15	3
Political Science	19	5	14	4
History	11	0	11	5.5
Regional Studies	11	0	11	5.5
Elementary Educ.	17	10	7	7
Physical Educ.	6	3	3	8
Law Enforcement	9	9	0	9.5
Mathematics	9	9	0	9.5
Psychology	11	16	-5	11

Unmet Academic Needs

Students have quite varied reasons for the courses they take during their academic careers: some of the courses are required; some are recommended; some reflect the student's early interests or priorities that have since withered; some were taken because they were believed to be especially easy, interesting, worthwhile in themselves or of particular career value after graduation. In addition, some courses students would wish to take are simply not available because offerings are either limited or inconveniently scheduled, so substitutes are found. Inevitably, then, most students will graduate not only with a sense of pride and satisfaction in goals met but also with some wistful regret over courses not taken.

Postgraduate experiences, whether on the job or in graduate training, must certainly reinforce the time-honored admonitions of "commencement" speakers that all is hardly complete and the moment of graduation. In particular, the three out of every four graduates (74%) who find themselves doing work for which they were not speci-

fically trained, and the two of every three (68%) whose labor is quite marginal or totally unrelated to their major fields, discover that skills and knowledge outside of their personal fields of primary interest are important in their present positions.

For all the above stated reasons I felt it important to quiz graduates about courses they had not taken in order to identify some of the unmet academic needs of recent BSC graduates. Subjects were presented with a list of 21 courses and were asked to specify the five which they most wished they had taken while at BSC. The list included seven Humanities courses, seven skills-oriented or business-oriented courses (two on reading and writing skills and five related to business) and seven Social Science choices (three on interpersonal relations and four on political or social issues). Table 3.12 categorizes and presents the full list of course options and reports the overall frequency with which each was chosen.

Table 3.12: Percentages of Graduates who Would Like to Have Taken Selected Courses

Business Courses (33% average)

Management	37%
Finance	35%
Accounting	34%
Computer Programming	30%
Business Economics	28%

Writing Courses (28% average)

Creative Writing	28%
Reading and Writing Workshop	27%

Organizational and Interpersonal Relations (26% average)

Human Relations	38%
Group Dynamics	22%
Organizational Theory	17%

Politics and Social Issues (22% average)

Social Issues	25%
Political Issues	23%
The American Economy	21%
The American Working Class	20%

Humanities and General Social Science (8% average)

World Literature	12%
Non-Western Cultures	10%
Marxist Theory	10%
Comparative Religions	9%
Shakespeare	8%
Art Appreciation	2%
Music Appreciation	2%

Several interesting findings emerge from the table. First, it is clear that recent graduates see little need to expand present offerings in the humanities; additional courses in this area were chosen only 8% of the time. Graduates were three times as likely to specify an additional social science course and four times as likely to specify an additional business or writing course as they were to opt for further courses in the Humanities.

Secondly, the need for additional training in business-related subjects is acutely felt; Natural Science majors most often opted for business courses (41% average per course popularity), while education majors were least interested in this area (28% average popularity). This latter result may indicate that the business and management programs at present being developed at BSC, though attractive to a great number of ex-students, will be unable to meet the needs and interests of the

increasing numbers of students forced out of the field of education by the present and future shortfall of teaching jobs.

Thirdly, a high proportion of graduates expressed an interest in further training in writing skills. Career majors were the only group relatively disinterested in writing courses, perhaps because the fields of police and fire science (from which these career program representatives were predominantly drawn in 1975) place relatively little emphasis on writing and other skills traditionally cultivated by academe. Finally, graduates from all divisions of the college expressed interest in additional Social Science courses. Courses in the structure and social-psychology of organizations and groups — what could be called "getting along" courses -- were particularly popular. The single most popular course among the listings was Human Relations, a vague but friendly sounding course chosen by 38% of the graduates. Courses in politics or social issues also attracted a reasonable following with slightly more than one in five graduates (22% average) specifying such choices as "The American Economy," "The American Working Class," etc. Career program graduates expressed a particularly strong interest in such courses, with an average of 30% choosing each course.

A word of caution is necessary lest the preceding be misinterpreted as a picture of the strengths and weaknesses of the entire present curriculum. Choices made by graduates were necessarily restricted to the list of course options with which they were presented. The 21 course titles included on the list represent my attempt to representatively cover three broad areas, and the list ultimately rests on my intuitions

about student interests and priorities. For example, I excluded both Natural Science and Education courses, gratuitously judging them to be sufficiently available at present to interested students. It is entirely conceivable that a different or a more comprehensive list of courses could produce a significantly different picture of the balance of unmet needs in different areas. I would only conclude that the abovementioned areas are among the real and unmet needs of recent graduates. Further research might well uncover other unmet academic needs not adequately probed in this survey.

Was It Worth It?

Two questions seeking the graduates' summary evaluations of the entire undergraduate experience asked: "Would you attend a four-year college again?" and "Would you attend Boston State again?" In reply to the first question, 93% would repeat their college experience. The exceptions were concentrated among people who had difficulty finding a job after graduation, were displeased with their salary, their work and the job's long-term potential, and who felt that their expectations upon entering college had been crushed.

In response to the second question, more than a third of the graduates (37%) said they would not attend Boston State again. As usual, those graduates who were satisfied with the work they were doing and the salaries they received also showed a higher degree of satisfaction with BSC than did those who were decidedly struggling in their early careers. Similarly, older students, veterans, married students and those with children were more pleased with BSC and willing to do it again. 84% of evening college students expressed a willingness to repeat their experience at BSC compared to only 59% of the day college students.

In general, it seems that BSC is most appreciated by non-traditional college populations -- older students, married students, students working full-time, etc. -- for whom the college may well represent a second chance. Younger students -- especially those who had friends attending other colleges or those who had difficulty at home with their parents -- were less likely to look back with satisfaction on the times they had spent at BSC.

SECTION IV: OUTCOMES: SALARY AND DETERMINANTS

Salary

329 of the 340 respondents to this survey provided data about their salaries, and the average (mean) salary reported was $7332.00.

Table 4.1 summarizes the distribution of salary levels. Of the 89 graduates who reported either no income or earnings under $5,000, most are persons out of the labor force, seeking work or working part-time. The great majority of graduates have salaries ranging from $5,000 to 12,500 (65% or 211). 26 graduates report earnings above $12,500, and more than half (15) of these are between $12,500 and $15,000.

Table 4.1: Current Annual Salary

Salary	N	Percent
$ 0	52	16%
up to 5,000	37	11%
5,000-7499	56	17%
7500-9999	93	29%
10000-12,499	62	19%
12500-14999	15	5%
15000-19999	7	2%
20,000-24,999	3	1%
25000 or more	1	-
	326	100%

The overall average salary of $7332, can be somewhat misleading because it includes several categories of graduates whose employability and earning power are subject to special contingencies. Full-time graduate students, for example, are underpaid and under-employed by choice, as are some married women with children.* Similarly, some graduates command high salaries that cannot

* Of the 14 married women with children who responded, 10 work full-time; only the four who reported themselves as unemployed or out of the labor force were excluded from analysis in the reduced sample.

reasonably be attributed to their studies at Boston State; those who earned more than $150.00 per week (take home) while they were students display the highest postgraduate incomes of any category of graduates in the survey. Nor is this surprising, for most of these graduates are career police officers or other older students who came to BSC in the middle of well established careers in search of monetary or other types of enhancements. More generally, any students who were over thirty years of age could reasonably be argued to constitute a special group who, by virtue of age and experience, hold a position in the job market superior to that of other graduates. When groups such as these are excluded, we are left with a smaller group (264) whose salaries average $7144. This smaller group of 264 graduates shall hereinafter be referred to as the "Reduced Sample."

Only 72% (241) of the respondents held full-time jobs at the time of the survey. The remainder represent a mix of people working part-time (13%), people seeking work (10%), and those who have left the workforce (5%). The large proportion of graduates thus participating less than fully in the workforce — whether by choice or involuntarily — obviously has a significant impact on salaries. The average salary among only those graduates who hold full-time jobs is $9317, almost $2000 higher than the average for the entire sample. When we further reduce this group by excluding those graduates who were either over thirty at graduation or who already held well paid jobs, the average salary drops to $8593 (n=210).

Table 4.2: Average Salaries for Selected Groups of Graduates

Group	N	Ave. Salary
All Graduates	329	$ 7332
Reduced Sample	264	$ 7114
All Full-time Employed	238	$ 9317
Full-time Employed, Reduced Sample	210	$ 8593

Differences in Salary by Sex

As table 4.3 indicates, the overall average salary of $7332 for all graduates masks a quite substantial discrepancy between the salaries of men and women:

Group	N	Men	Women	Difference
All Subjects	329	$8428	$6367	$2061
Full-time Employed	238	10,465	8244	2221
Reduced Sample	264	7874	6580	1294
Reduced Sample, Full-time Employed	210	9215	8070	1145

Women's salaries averaged $6367 compared to an average of $8428 for men — a difference of over $2000. The difference is even larger when one compares the salaries only of those who hold full-time jobs ($10,465 for men vs. $8244 for women), so the discrepancy cannot reasonably be attributed to lesser participation in the labor market by women. In fact, there is only a 1% difference between the percentage of men (72%) and women (71%) employed full-time.

Because the majority of older, pre-employed graduates are men, sex differences in salaries, though still substantial, are smaller in the reduced sample, in which men average $7874 while women average $6580 — a difference of $1294. The difference further narrows when only those in the reduced sample with full-time jobs are considered; these men average $9215 compared to $8070 for women — a difference of $1145.

Salaries by Division and by Major

Table 4.4 shows substantial variations in the salaries obtained by graduates of the several divisions within the college:

Table 4.4: Average Salaries by Division for Selected Groups

Division	All Cases	Full-time Employed	Reduced Sample	Reduced Sample, Full-time Employed Only
Career	$8746	$11,120	$7374	$9740
Education	6753	8680	6587	8236
Sciences	7870	9359	8253	8903
Social Science	7324	9723	7456	9077
Humanities	7803	9218	7533	7907
All Cases	7332	9317	7144	8593
N	329	238	264	210

When all respondents are considered, graduates of "career programs" seem to fare best and education majors worst. Further analysis bears out the unfavorable position of education majors, but the figure for "career" graduates proves misleading. Since a high proportion of the Law Enforcement majors come to the college in their late twenties to early forties, already employed full-time, and with many years of experience and seniority already amassed, their salaries are necessarily higher than graduates of other majors with whom, therefore, no a pari comparison can be made. However, controlling for age and for prior employment, the salaries of career program graduates appear comparable--- a bit lower, in fact -- than those of other graduates (except those in education). Science majors appear better paid ($8215) than the majority of graduates, while Education majors trail the rest at an average of only $6587.

Further breakdowns within divisions by major show substantial amounts of fluctuation from one major to the next. These variations are summarized in table 4.5, but the reader is cautioned against overinterpreting these results. Comparisons across majors break much of the sample into dangerously small subgroups which are highly susceptible to errors of estimation and sampling. Moreover, differences from one major to the next become highly reflective of extraneous factors such as the percentage of graduates continuing their education on a part or full-time basis.

Table 4.5: Average Salaries by Major for Selected Groups

Major	All Cases	Full-time Employed	Reduced Sample	Reduced Sample, Full-time Employed Only
Biology	$7129	$7200	$8963	$8784
Elementary Ed.	6535	7339	6530	8030
English	8022	8226	8170	8375
History	7034	8907	5731	6134
Law Enforcement	8519	9435	6809	9636
Mathematics	8791	11386	8048	9054
Physical Ed.	7431	13970	6774	9072
Political Sci.	8011	10339	8454	9463
Regional St.	7659	10013	7564	9972
Psychology	7631	11162	7677	9226
Sociology	6368	9226	6555	8242

(Note: majors represented by fewer than 10 respondents were not included in this table).

Sex Differences in Salaries by Division

Since, in 1975, a large proportion of women graduates were still concentrated in education majors, and since the market for teachers was well known to be extremely tight, it seemed appropriate to examine the possibility that much of the discrepancy between men's and women's salaries might result from this concentration of women in an unpromising career area. The results of salary breakdowns by sex within divisions and majors did not support this hypothesis; quite the contrary. As table 4.6 indicates, with the exception of "career programs" graduates (for whom estimates of sex differences in salaries are unstable and questionable due to a paucity of women graduates) differences between men and women within the field of education are greater than differences in the other divisions of the college. When all subjects are taken into account, the differences between men's and women's average salaries stand at $2435 in education, $1739 in the social sciences, $1455 in physical sciences, and $620 in the humanities — each discrepancy favoring men over women.

When we exclude the categories of graduates previously labeled inappropriate, these differences narrow; when we also restrict comparisons to those with full-time jobs they narrow further, but under whatever combination of restrictions and conditions that appear logical to apply, the differences between men and women remain greatest within the field of education, as table 4.6 demonstrates. Hence, if women are suffering disproportionately from the decline in jobs for teachers, it is not simply for want of teachers' jobs; it is, more so, for want of fair and equitable treatment and consideration in allocating the jobs that remain available and, perhaps also, because of "pure wage discrimination" in the positions they do obtain.

Table 4.6: Sex Differences in Salaries by Division, Selected Groups ***

Division	All Cases	Full-time Employed	Reduced Sample	Reduced Sample, Full-time Employed Only
*Career	-3746	-1319	-2085	+318
Education	-2435	-3305	-1744	-2253
Sciences	-1455	-1148	-826	-1109
Soc. Sci.	-1739	-726	-1355	-40
**Humanities	-620	-2260	+1388	+55

* figures for career program graduates should be interpreted cautiously, since there are only six female career program graduates in the entire sample and even fewer in more select subsamples.

** The extreme fluctuations in the salary differences of male and female humanities graduates result from the markedly different employment patterns of the two sexes in this category. All female humanities graduates (12) are employed full-time while only half of the eight male humanities graduates hold full-time jobs.

*** Figures represent the average for males subtracted from the average for females. Hence, negative figures indicate a disadvantage for women, and positive figures represent a disadvantage for men.

The Effects of Race and Age

Since no attempts to oversample small categories of graduates were made, non-white graduates constitute only 5% (17) of the overall sample. With so few non-white cases, the differences that appear between the salaries of whites and non-whites could be highly subject to random influences and errors. When all cases are considered, the average salary of non-white graduates ($7269) is almost identical to that of white graduates ($7287). In the reduced sample, a difference of $400 surfaces between the average for whites ($7094) and non-whites ($7494), but the number of non-whites on which this average is based has shrunk to only 10. Although the evidence does not warrant any strong or definitive conclusions, salary outcomes among the 1975 graduates do not appear to be affected by race.

Age, on the other hand, has a quite significant effect on salaries, as table 4.7 illustrates. Whether all cases or just those with full-time jobs are considered, salaries increase sharply with increases in age at graduation -- and this applies equally to the full and to the reduced samples.

Table 4.7: Salary by Age, Selected Groups

Age Category	All Cases	Full-time Employed	Reduced Sample	Reduced Sample, Full-time Employed
Over 30	12,272	15,228	n.a.	n.a.
24 to 29 yrs.	7782	9732	7997	9732
21 to 23 yrs.	6300	8075	6714	8075

n.a. not applicable; all those over 30 were excluded, by definition, from the reduced sample.

The striking pattern of steeply rising salaries with increases in age at graduation is somewhat exaggerated by the tendency for older students to work more hours for better pay while still in college - factors which have a strong carryover effect on salaries after graduation, as I shall soon illustrate. However, even when these extraneous influences are controlled, as in Table 4.8, the basic pattern linking age with salary, though diminished, remains unmistakeable. This finding, though no comfort to our youthful students and graduates, should prove supportive to those who most favor encouraging mature citizens to drop back into education in mid-career.

Table 4.8: Salary by Age with Weekly Student Earnings Controlled, All Subjects

Age Category	$0 - 20	$21 -40	$41 - 90	Over $90.00
Over 30	a	a	a	$16,961
24 to 29	a	$7498	$7966	8496
21 to 23	$5622	5640	6744	8405

a - fewer than 10 cases in these categories, so calculations were omitted.

Combined Effects of Age and Sex on Salary

We have noted that both age and sex substantially affect the salaries of graduates. Table 4.9 presents the combined effects of these two influences:

Table 4.9: Salary by Age and by Sex

Age Category	All Cases	Full-Time Employed	Reduced Sample	Reduced Sample, Full-Time Employed
Males Only				
over 30	$15,330	$17,551	n.a.	n.a.
24 - 29	8103	10,021	8103	10,021
21 - 23	6740	8511	7339	8511

Table 4.9 (con.)

Age Category	All Cases	Full-Time Employed	Reduced Sample	Reduced Sample, Full-Time Employed
Females Only				
over 30	$7429	a	n.a.	n.a.
24 - 29	7023	$8966	$7301	$8966
21 - 23	6086	7862	6437	7862

a - fewer than 10 cases, so calculations would be misleading

As tables 4.10 and 4.11 below illustrate, earnings after graduation are closely associated with both (1) the number of hours a student had worked while attending BSC and (2) the student's average weekly take-home pay while in college. In turn, hours worked and weekly earnings are, of course, strongly related to one another, almost to the point of redundancy. Hence, this discussion will concentrate on the factor which more closely and reliably predicts post-graduate earnings — namely, weekly earnings while in college. With almost unfailing consistency, we find that the higher a student's earnings while in college, the higher they will be upon graduating. This finding appears in both the full and the reduced sample and applies equally to full-time workers and to all cases combined.

Table 4.10: Salary by Hours Worked Per Week While a Student

Hours	All Cases	Full-Time Employed	Reduced Sample	Reduced Sample Full-Time Employed
none	$5833	$8749	$7205	$8749
1 to 5	6078	8958	6624	8890
15 to 24	6595	8302	6765	8288
25 to 34	7717	9030	7881	8647
35 or more	11,515	13,169	8774	10,213

Table 4.11: Salary by Weekly Take-Home Pay While a Student

Student Earnings				
Under $20/week	$4926	$7246	$6521	$7246
$21 to 40	6110	7964	6261	7907
$41 to 90	7099	8842	7444	8812
$90 or more	10,875	12,235	8574	10,087

Although the relationship between earnings while a student and earnings thereafter has an inherent plausibility to it, suggesting as it does a possible continuity of employment for many students before and after graduation and suggesting also the possible effects of building contacts and experience in the job market, the steepness of salary increase as a function of student earnings mandates a close examination of external factors whose hidden influence might be artificially reflected in table 4.11 and which, if controlled, might allow us a clearer perception. Age and sex immediately come to mind as just such possible external influences on the relationship we have observed. Each sex and each age group shows a different pattern of employment and earnings before, as well as after, graduation.

Males in the sample work an average of 23.5 hours per week while in college at an average net wage of $3.09 per hour(take-home), resulting in an average weekly take-home pay of $72.54. Females, on the other hand, work fewer hours (18.7) at lower net hourly wages (2.41), resulting in a substantially lower average take-home paycheck — $45.03 per week. Hence, we must consider whether the salary differences by pre-graduation income summarized earlier in table 4.11 may partially reflect either the sex differences or the age differences that underly differences in earnings while a student.

Controlling Sex

Table 4.12 shows that both student earnings and sex have unmistakeable and consistent effects on the salaries of 1975 graduates:

Table 4.12: Salary by Student Earnings, Sex Controlled

Student Earnings	All Cases	Full-Time Employed	Reduced Sample	Reduced Sample Full-time Employed
Males Only				
under $20/wk.	a	a	a	a
21 - 40	7103	8902	6956	8730
41 - 90	7390	9170	7722	9170
over 90	11,456	12,964	8888	10,444
Females Only				
under $20/wk.	5747	7546	6352	7546
21 - 40	5726	7549	6012	7554
41 - 90	6766	8501	7104	8416
over 90	8605	9466	a	a

a) fewer than 10 cases, so calculations not performed

In each earnings category males receive higher salaries than females; and for each sex, increases in student earnings are associated with higher salaries after graduation. These effects hold true in each of the four sample or sub-sample versions. Controlling for gender only very slightly mitigates the strong impact of student earnings. Rather, controlling for gender helps to specify the greater impact that differences in student earnings have on the subsequent salaries of men than on the salaries of women; men's salaries increase much more steeply and profoundly as a function of their student earnings. Women who work and obtain better wages than their peers while in

college can expect some carryover effect after graduation but the payoff for so doing will be much smaller than the payoff to men in similar circumstances.

Controlling Age

Re-examining the effects of Student earnings, this time with age controlled, we again observe in table 4.13 that the influence of student earnings is a robust one unmitigated by salient controls:

Table 4.13 Average Salaries broken down by Age and Student Earnings

Student Earnings	Age		
	21 - 23	24 - 29	30 or over
under $40	$5636	$6849	a
$41 - 90	6744	7966	a
$91 +	8405	8496	16,961

a) fewer than 10 cases

Within each age category higher earnings while a student are associated with higher salaries after graduation. Conversely, within each student earnings category, postgraduate salaries increase with the age of the graduate. Although controlling for age does not disturb the student earnings factor, it does allow us to specify the conditions under which the effects of age will disappear. Graduates aged 24 to 29 generally show about a $1200 salary advantage over graduates aged 21 to 23, but this advantage all but disappears when net weekly earnings reach $90. Below the $90 threshold, young graduates receive woefully low salaries -- substantially below those of older but otherwise comparable graduates; above this threshold, young graduates begin to achieve respectable salaries.

Evening Students

Salaries of evening school graduates appear to be substantially higher than those of day school graduates. Evening students averaged $9960 -- more that $3000 above the average for day school graduates ($6851). This difference is obviously somewhat reflective of systematic age, sex experience and work status differences between day and evening students, so controls must be introduced to properly understand this relationship.

Table 4.14 breaks day and evening students into age categories, but salary differences by no means disappear when we control for age. As usual, the largest salary differences occur in older age categories, and the difference between day and evening graduates aged 21 to 23 falls to $900 -- a substantial difference but a far cry from the $3000 with which we began.

Table 4.14: Salary Broken Down by Age for Day vs. Evening Students

Age	Day	Evening
Over 30	11 578	13 533
24 - 29	7 080	9 612
21 - 23	6 249	7 146

Separating males from females but does not noticeably alter the salary gap. Evening college males surpass day school males in salary by about $3100 (10,924 vs. 7835), while evening college females surpass their day school conterparts by about $2600 (8629 vs. 6058).

Table 4.15 assesses the effects of earnings while in college -- one of the major advantages of evening students over day students. The majority of evening students are concentrated in the high earnings categories, so comparisons are somewhat limited, but it is clear that the majority of day school students lag way behind evening students in salary irrespective of earnings while in college. The table does suggest, however, that a gap of $2000 is a more realistic figure that $3000 when one controls the effects of prior earnings and employment.

Table 4.15: Salary Broken Down by Student Earnings for Day vs. Evening Students

Student Earnings	Day	Evening	
$1 - 20	5109 (27)*	———	(1)
$21 - 40	6057 (89)	6694**	(8)
$41 - 90	6848 (122)	9102	(14)
$ Over - 90	10039 (32)	12092	(22)

* Numbers of cases for each cell are given in parentheses.

** This figure should be interpreted with caution due to the low number of cases in the cell.

If it were possible to simultaneously control the effects of both age and prior employment, a much smaller gap would obtain between day and evening students than that suggested by the original figures, but the superior position of evening school graduates would unmistakeably remain.

Salary and Academic Performance

Gross averages initially suggested that graduates who had done well academically in high school and/or college later received salaries lower than those with poor academic records — a curious,disturbing, even anomalous finding. For example, graduates with BSC grade point averages above 3.4 quality points (A-) actually averaged $400 lower in salary than their fellow graduates whose cumulative grade point averages were between 2.5 and 2.99 ($7055 vs. $7440). There are several reasons for this, however, that become clear as the data is further analyzed.

First, students who get good grades ofter do so because they devote more of their time to study. Students busy with assignments have less time for extra-curricular activities, so they tend to work shorter hours and earn less. Since student jobs affect later salaries some academically devoted students will later suffer a slight disadvantage. Secondly, many of the most successful students go on to graduate studies, thus foregoing potential earnings in early years after graduation for the sake of later benefits. Hence, the lower salaries of academic

standout somewhat reflect a voluntary and temporary withdrawal from the labor market. Thirdly, and perhaps most importantly, a disproportionate number of those graduates who accumulated the highest grades while attending BSC were female. The serious underpayment of women graduates has already been discussed in detail and needs no further comment.

When the obfuscating effects of these confounding factors are removed from our analysis, academic performance takes its proper place as a factor with slight but positive effects on postgraduate earnings.

Summary

Analyzing the determinants of salary and describing salary variations among groups of graduates has proved especially complex because of the close intertwining of the influences on salary one with another and because voluntary choices of some graduates to partially or fully refrain from labor market particpation up to their capacity and training all have to be taken into account. Gender, ge, academic field, and hours and wages while a student have all been shown to have important primary affects on the salaries of graduates. In addition, findings suggest that race does not significantly affect graduates' salaries, grades have a slight effect on salary, and evening school graduates are substantially better paid than their daytime counterparts.

SECTION V: EMPLOYMENT, OCCUPATIONS, GRADUATE SCHOOL, AND SATISFACTION

Employment

Approximately fifteen months after graduation when this survey was conducted, slightly under three fourths (71%) of the respondents reported that they held full-time jobs. Of the remainder, 13% were working part-time; 10% were in search of work; and a few (5%) classified themselves as "outside the labor force." Of course, not all graduates sought immediate employment, for one in ten postponed serious contact with the job market by attending graduate school on a full-time basis. Neither age nor sex seemed to affect employment status by more than a negligible percentage point or two in any category. The rate of full-time employment stood at 73% for males, 71% for females, 75% for those 35 or older, 72% for those aged 24 to 29, and 71% for the 21 to 23 age category. When full-time graduate students are excluded, the overall percentage of graduates holding full-time jobs climbs to 76%; comparisons across age or sex categories, though adjusted upward, remain essentially the same.

Employment, by Division and by Major

Variations in employment status by division are relatively small for the most part. When all subjects are considered, Science majors most often hold full-time jobs (80%), followed by Humanities and Career Program majors (74%), Education majors (70%) and Social Science majors (69%). These figures, however, are somewhat affected by differential rates of graduate school enrollment, involuntary withdrawal from the

labor force, and patterns of employment that antedate graduation. When, in the reduced sample, these biasing factors are controlled, the following rates of full-time employment result: 92% in Sciences; 82% in Humanities; and 73%, 72% and 70% respectively among Social Science, Education and Career Program graduates. Looked at either way, the variations in employment rates by division remain quite small, and only the Sciences division can claim a success rate significantly different from the rest.

Discounting full-time graduate students and those out of the labor force,* variations in employment rates between individual majors were also small, for the most part. Full-time employment was highest among majors in Biology (100%), Math (91%), Political Science (86%) and Sociology (80%). The lowest rates occurred in Regional Studies (61%), Physical Education (69%) and Law Enforcement (70%). One interesting difference emerged between two relatively depressed areas of teaching. 87% of the (15) males who graduated with a major in Elementary Education but only 70% of the (87) females in the same field found a full-time job. Among Physical Education majors, however, the situation was reversed: 75% of the women but only 52% of the men held full-time jobs at the time of the survey.

Holding a job while still in college affects later employment in much the same way that it was earlier shown to affect postgraduate

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* the "reduced sample" is not used here because its reduction of cases does not well serve so detailed a subdivision as a breakdown of the population by major. Instead, only those cases most likely to bias the interdepartmental picture — graduate students and those who have chosen neither to hold a job nor to seek one — have here been excluded.

salaries: 82% of those graduates who had worked 25 hours or more per week while students are now employed full-time, compared to 70% of those who worked between 15 and 24 hours per week, and compared to a full-time employment rate of only 61% for those who either had not held jobs in college or worked fewer than 15 hours per week. The employment rates of each group rise when only the cases in the reduced sample are considered, but the same comparisons between groups obtain, as can be seen in table 5.1:

Table 5.1: Percent of Graduates Holding Full-Time Jobs, by Hours Worked per Week while a Student -- Full and Reduced Samples

Hours Worked per Week while a Student	Full Sample	Reduced Sample
None, or less than 15	61%	69%
15 to 24	70%	74%
25 or more	82%	83%
	72%	75%
	n= 333	n=265

Marital status seems to affect employment differently according to whether the graduate is male or female. Married men are much more likely (88%) than their single counterparts (63%) to be employed full-time. Women, on the other hand, are equally likely to hold full-time jobs whether they are single or married. Moreover, when dependents are considered, both men and women with children are a good deal more likely to be employed full-time than those without children. It is possible that these patterns connecting marriage and children with full-time employment antedate both attendance at and graduation from BSC

and reflect mostly on the question of who decides to return to school after an absence.

Number of Jobs Since Graduation

Almost half of the graduates who responded (49%) said that they have held but one job since graduation, although 43% (68) of these were unemployed for some time (mean: 4.6 months) before they obtained their current position. Only 9 graduates had not held any job since graduation, and 7 of these were full-time graduate students.

One in three (32%) has held two jobs since graduation; one in ten (11%) has held three jobs; and a few (4%) have held four or more jobs. Salaries progressively decline with frequent job changes: 56% of those who have held three or more jobs (but only 36% of those who have worked steadily at a single job) are currently receiving a yearly salary under $7500. Hence, although some may change jobs to better their position, the majority of the job changes experienced by this set of 1975 graduates were symptomatic of employment problems and a struggle to overcome them.

Older graduates, especially those with dependents, were less likely than others to switch jobs -- partly, no doubt, because some of these graduates had already established themselves in relatively stable careers before embarking on their sojourn through Boston State.

Length of Unemployment

Approximately half of the graduates (48%) reported having been

unemployed for some length of time following graduation. Most of these cases involved unemployment for three months or less, but one in five graduates (21%) had been out of work for a longer period. Joblessness extended for a median of 3.3 months when it did occur. Social Science graduates were most often afflicted, with 55% of their number reporting some period of unemployment.

The unemployment picture for Career Program graduates is made unusually complex by several factors. First, many of these graduates entered BSC as already established police officers for whom job seeking and the possibility of temporary unemployment was not a concern. Secondly, a good deal of the temporary unemployment discussed in this section is a result of decisions to attend graduate school, and Career Program graduates were the group least likely to continue their education; only two of their number attended graduate school at all — and these on a part-time basis. As a consequence, they have the lowest rate of temporary unemployment in the sample; only 22% had been unemployed at any time since graduation. However (somewhat paradoxically it might appear) Career Program graduates have the highest rate of <u>current</u> unemployment of any group in the sample -- their rate standing at 15% compared to 10% for the rest of the sample. Additionally, those Career Program graduates who are presently unemployed have been so indisposed for an average of 6.8 months compared to an average length of unemployment of 4.4 months among the rest of the currently unemployed.

Men are somewhat less likely (44%) to have been temporarily unemployed than women (51%), but, once unemployed, men tended to stay that way longer. 59% of the men (but only 38% of the women) who had been unemployed remained so for three months or longer. It is not at all clear why this is so, but one might speculate from this that unemployed women more quickly accept a form of unemployment, while men somewhat more stubbornly hold out for a better job.

Past unemployment led many graduates toward eventual underemployment — at least in terms of salary. The salary differences between those who had and those who had not experienced some unemployment averaged over $3,000: graduates with no unemployment up to the time of the survey had salaries averaging $8861; with one to three months of unemployment behind them, they averaged $6026; with longer periods, only $5334.

Finally, superior academic performance seemed to have a modest positive impact on employment success. Students with higher grades were less likely to suffer unemployment after graduation even though, as I demonstrated earlier, they were also less likely to hold steady, well paying jobs while enrolled in college. When it did occur, moreover, their unemployment was of a shorter duration. Unemployment was also less of a problem for those graduates who had done well in high school, for those with relatively high scores on the Scholastic Aptitude Test (S.A.T.) in Mathematics (but not in verbal abilities), and for those who finished college in only four years.

Relationship Between Major and Job

Graduates were asked what connection, if any, existed between the job they presently held and the education they had received at Boston State. Overall, graduates were about equally divided between those who saw a clear relationship between their present job and their previous studies (46%) and those who could not claim any such direct connection (53%).*

The most common response, by one out of every three students (35%). was that the two were unrelated. This is not surprising in view of the predominant findings of several long-term studies of national samples of college graduates, which similarly find high percentages working in fields unrelated to their undergraduate specialties. On the other hand, one in four (26%) stated that they were working at the specific career for which they had been trained (usually teaching), one in six (16%) called their work "related to their major," and a handful (4%) said it was related to their minor. The rest (18%) hesitated to call their work wholly unrelated to their education and, instead, suggested a modest, "indirect" relationship between the two.

Only three majors could reasonably refer to "specific careers" for which they had been trained: 42% of elementary education majors, 37% of physical education majors, but only 14% of law enforcement majors said they were working at the specific career for which they had been trained. Rather startling differences appeared between male and female elementary education graduates. More than three times as many men as

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* The above figures apply to the entire sample, including all those who have not yet found full-time work. When the figures are recalculated for the full-time employed only, they remain essentially the same -- with shifts of no more than one or two percentage points between categories.

women (53% vs. 17%) held jobs as elementary school teachers, although many of the rest of the women held teaching or teaching-related jobs. Women could also be found working as insurance clerks, secretaries, clerical employees, bank tellers, bookkeepers and sales clerks. Among Law Enforcement majors, the figures are especially surprising, with half of these graduates (48%) working at jobs wholly unrelated to their training.

Table 5.2: Percent of Graduates Doing Work Related to their Education, by Division *

Division	All Graduates with Jobs (full or part-time)	Reduced Sample
Career Programs	48%	38%
Education	58%	63%
Sciences	54%	58%
Social Science	30%	35%
Humanities	28%	22%
	n=279	n=256

* (Related: percent who responded that their job was directly related to their major or to their minor, or was the specific career for which they had been trained.)

Also consistent with the general findings of previous national surveys, Social Science and Humanities majors most often claimed that their work was not related to their education. 67% of majors in History, 57% in Sociology, 50% in Regional Studies and 44% of those

in Political Science were now working in unrelated jobs. Psychology, however, was a major exception, with the highest proportion of any group of majors (63%) doing work related to the major. In considering and judging these figures, however, it should be kept in mind that History, Political Science and Sociology are also three of the four fields most likely to send their majors on to graduate school.

Job Satisfaction

Seven out of ten graduates who were working full-time reported that they were satisfied with their jobs; half of these, in fact, said they were very satisfied with their work. Satisfaction levels were almost identical for men (71%) and women (69%), and age also showed only a slight impact, with older graduates marginally more satisfied with their work. Employed graduates with Education degrees were the most satisfied group (79%), and Career Programs graduates were least often satisfied (55%). Elementary Education (80%) majors reported the highest levels of satisfaction, while Law Enforcement majors were least satisfied (50%). In general, students who decided on their major early, who achieved high grades throughout college and who found work that was closely related to their studies reported the greatest levels of satisfaction with their work:

Table 5.3: Percent Reporting "High" Work Satisfaction Payoffs

Category	Percent
Entered with definite major plans; completed	35%
Entered with no definite major plans	15%
Grade Point Average of 3.4 or higher	46%
G.P.A. under 3.0	23%
Work closely related to major or minor	59%
Work indirectly related or unrelated	12%

Among all employed graduates (irrespective of full-time or part-time status), Education majors remain most likely (73%) to say they were satisfied with their work, and Career Program graduates were still least likely (48%) to be satisfied. Since job satisfaction is affected by whether or not the work one is doing has any connection with previous studies, and since work-study relatedness varies a good deal from field to field, it seemed reasonable to re-examine job satisfaction separately for those whose work is related and those whose work is unrelated to their college studies. When this is done it becomes clear that not only do chances of getting "related" work vary widely between divisions of the college (with levels of satisfaction varying accordingly), but the chances of being content doing "unrelated" work are very different from one field to the next. Humanities majors, for example, are least likely to find work related to their fields; however, they have the best chances (56%) of being satisfied with a job that turns out to be unrelated to their studies. Career majors seem in a double bind: their chances of finding work related to their training are only average (48%), but, when they end up in unrelated work -- as do a majority of their number -- they are more likely than any other group to be dissatisfied (82%). Table 5.4 summarizes the results.

Table 5.4: Work Satisfaction as a Function of the Relatedness of One's Work to One's Education, by Division -- (Reduced Sample -- full-time or part-time).

Division	Percent Satisfied with their Work	Percent doing Unrelated Work	Percent in Unrelated Work who are Satisfied
Career Progs.	47%	58%	18%
Education	76%	40%	60%
Sciences	64%	36%	38% *
Social Science	60%	68%	47%
Humanities	63%	77%	56%
	n= 231	n=231	n= 120

* fewer than ten cases in this cell.

Long-Term Prospects

Those graduates (241) who held full-time jobs were asked to rate the "career potential" of their present position and line of work: 43% replied that their jobs had "definite potential;" 34% saw "some potential" in the work they were currently pursuing; and 24% found themselves in positions with "no potential" for career development. Overall, then, considering that 28% of the graduates were not working full-time at the time of the survey, only slightly more than half of the graduates (54%) held full-time positions in which they perceived at least a reasonable chance of developing a satisfying career.

Many of the graduates who were most optimistic about their career opportunities were those who approached the job market with more than a degree in their hands: older graduates, those with substantial earnings during their college years, and those who matriculated in the Evening College. In other words, in a population of equally educated employment candidates, previous work experience becomes a crucial determining factor shaping the distribution of career opportunities.

Men were considerably more likely (50%) than women (36%) to hold jobs with definite career potential. Among academic divisions, Humanities majors were considerably more likely than any other group to be confident that their jobs had definite career potential; Career Program graduates were considerably less optimistic than any other group about their futures, while other divisions clustered around the overall average.

Optimism about the job's long-term potential varied substantially by occupational type. 59% of all professionals felt their jobs had definite career potential. The percentage was almost identical (57%) for persons involved in sales, but only 4% of all graduates held jobs in this area. For all others, there was a consistent and precipitous dropoff in career optimism to an average of 25%: clerical workers (21%), manual workers (40%), service workers (25%) and managers (26%). The low level of career confidence among those classified as administrative or managerial is most striking -- especially considering their relatively high average earnings ($9766).

Occupations

Table 5.5: Occupations, full-time Employed only

Professional	49%
Managerial	12%
Sales	4%
Clerical	23%
Manual	5%
Service	10%
	99%

Table 5.5 summarizes occupational data for graduates who are employed on a full-time basis. More than three out of every four of the graduates who hold professional or technical positions are either teaching or in teaching-related fields (eg. educational counseling). Hence, although nearly three out of five 1975 graduates who found full-time employment are currently working at a professional or managerial level, this figure will be adversely affected in the future by the continuing decline in jobs for Education majors.

Even though almost half the graduates were doing professional work and most of these in a few categories of teaching-related occupations, nonetheless graduates overall were found working in a tremendous variety of different occupations. The list of all jobs reported by graduates includes over 75 occupational titles -- with only one graduate in a majority of the categories. Outside of professional work, only clerical fields showed any substantial concentration of graduates (23%), and these were mainly low level positions: secretaries, typists, keypunchers, computer operators, bank tellers and

sales clerks. Table 5.6 presents some of the more common occupational titles reported by graduates.

Table 5.6: Selected Occupational Titles of 1975 Graduates

Professional	
Elementary teacher	24
Secondary teacher	22
Teachers (not elsewhere classified)	10
Vocational/Educational Counselors	5
Social Workers	4
Technical	
Health technicians	5
Laboratory technicians	3
Recreation workers	3
Managerial	
Managers (n.e.c.)	9
Sales Managers	4
Office managers	4
Clerical	
typists	8
secretaries	5
sales clerks	4
keypunchers	3
computer operators	3
bank tellers	3
insurance adjusters	3

Employment Sector

Graduates were not directly asked whether they worked in the public or the private sector, but they were asked to designate the industry in which they were employed. One in three (31%) worked at providing educational services, and 11% did work in some branch of the health industry. No other sector of the economy claimed more than 10% of the graduates. If we assume that all teachers are working in public schools [an unrealistic assumption that somewhat inflates the estimate derived for the public sector] then 46% of the graduates

work in public sector jobs and 54% are employed by private industry. Excluding teachers, on the other hand, more than three fourths (78%) of the graduates who found full-time work were employed in the private sector. However, the cost of working in the private sector was high: teachers, education-related workers and employees of federal, state or local government averaged $7992 compared to only $6861 for those in the private sector — a difference of $1131.

Occupation and Salary

Table 5.7 presents mean salary levels for each occupational category:

Table 5.7: Average Salaries by Occupation -- full and Reduced Samples of full-time employed only.

Occupation	Full Sample	Reduced Sample
Professional	$9466	$9311
Managerial	9766	9333
Sales	11,464	9150
Clerical	7788	7473
Blue Collar	8146	8152
Service	11,144	8316
Totals:	$9295	$8724
	n=241	n=201

Figures for the reduced sample more accurately reflect what most graduates can expect, since they exclude the extreme high salaries of atypical graduates. When this is done, three occupational categories emerge as considerably better paid than the rest: professionals, managers, and persons in sales positions. The greatest concentration of relatively high salaries was in sales, where 57% were earning over

$10,000. Not surprisingly, men are paid better than women in each occupational category. The difference is greatest among managers and administrators ($2737) and smallest between professional men and women ($1237).

Professionals differed from all other workers in several, significant ways. They were more than twice as likely (66%) as non-professionals (30%) to be satisfied with their current salary. They were three times more likely (66%) than non-professionals (22%) to be doing work related to their education. They were three times more likely (45% vs. 16%) to be "very satisfied" with their work, were more likely (53% vs. 31%) to say their hopes had brightened since having entered college, and they were more than twice as likely (47% vs. 22%) to state that they expected their degree to help improve their socioeconomic position. On all these criteria, all non-professional categories from sales to service work blended together into an unfulfilled mass far below the levels of success and satisfaction of professional workers. Clearly, graduates expect to become professionals, and they do not often happily settle for less.

Graduate School

Almost one in three graduates (31%) was enrolled in a graduate program at the time of the survey, and another 46% stated their intention to enroll sometime in the future. 10% were enrolled in full-time graduate programs, while 21% attended on a part-time basis. Those who had been living away from their parents during college,

those with better academic records, older graduates and women were the groups most likely to continue their education.

There were substantial variations in graduate school attendance by major and by division, as tables 5.8 and 5.9 indicate. Part-time attendance was highest among Education majors, while full-time attendance and total attendance were both highest among Science graduates, followed closely by Social Science graduates. Almost half (48%) of female graduates in Social Science fields were in graduate school; in contrast the group least likely to attend graduate school was male Career Programs graduates (5%). Biology was the single field most likely to send its graduates on to further education (61%), while Law Enforcement was least likely (9%).

Table 5.8: Graduate School Attendance, by Major Field

Major	Full Time	Part Time	Total
Biology	39%	22%	61%
Elementary Ed.	2	30	32
English	14	11	25
History	17	28	45
Law Enforcement	0	9	9
Mathematics	0	27	27
Physical Ed.	6	13	19
Political Science	29	24	53
Psychology	6	22	28
Regional Studies	5	16	21
Sociology	22	15	37

Table 5.9: Graduate School Attendance, by Division

Career Progs.	0	9	9
Education	3	26	29
Science	21	21	42
Social Science	17	19	36
Humanities	15	17	32

Subjective Outcomes: Satisfactions with Work, Income, Personal Growth, and with the Quality of Education

A series of questions interspersed throughout the questionnaire asked graduates to evaluate what the time they spent at BSC had produced for them. Did they feel they were better off for having attended college? If so, in what ways were they satisfied and in what ways were they dissatisfied with the outcomes? As an investment, had college paid?

Factor analysis of the responses to these questions showed that the eleven items that measured satisfaction broke down into related but distinct component areas: seven items that had to do with academic satisfaction and with a sense of personal growth correlated highly with one another. A second cluster of four items emerged around issues of income and work satisfaction. [Parenthetically, it seems interesting that personal growth and self-esteem measures were closely intertwined with academic satisfaction but quite distinguishable and separate from income and work satisfaction.] Based on these results, two satisfaction indices were created and then correlated with other variables.

Academic and Personal Satisfaction

The first satisfaction index was composed of responses to seven questions: whether they had learned more or less than expected; whether the education had been better or worse than expected; how

Generally satisfied they were with BSC; and whether college had produced high or low payoffs in terms of (1) knowledge, (2) prestige, (3) personal growth, and (4) self-esteem. Responses to these seven items were pooled into a single score, and graduates were divided into three groups according to whether their academic and personal satisfaction score ranked "high"(29%), "medium"(28%), or "low"(43%).

Several categories of graduates turned out to be significantly more satisfied academically and personally than others: older students; those who received visible encouragement from their parents; those who entered with definite plans for their major field -- even if they subsequently switched majors; those who entered with high verbal S.A.T. scores, and those who graduated with high grade point averages.

Working while in school, far from diminishing academic satisfaction, seemed to enhance it. Only half (48%) of those who did not work, but two-thirds (67%) of those who worked full-time while in school scored well on the academic satisfaction index. Similarly, academic satisfaction increased as take-home pay while in college increased. The reasons for this are not at all clear, but the results of this survey definitely do not support the notion that work detracts from study.

Academic satisfaction bore a curious, curvilinear relationship to a student's high school academic background. Graduates who had rated their high schools as "average" were less satisfied than either

those from good ["excellent" or "above average"] high schools or those from poor ["below average" or "seriously deficient"] high schools. Similarly, those who claimed to have ranked either in the top or the bottom rungs of their high school graduating class were more academically satisfied with BSC than those in the middle of their high school classes.

Students oriented primarily toward acquiring knowledge and awareness of new ideas turned out a good deal more academically satisfied(71%) than were those who had attended mainly to acquire better career credentials (48%). Moreover, career program graduates (as distinct from career oriented students throughout the college) were less likely (22%) than graduates from any other division of the college (30%) to rank "high" on the index of academic and personal satisfaction.

Satisfaction with Income and Work

The second satisfaction index was composed from responses to four questions: degree of satisfaction with one's work; satisfaction with one's salary; and whether college had produced high or low payoffs in terms of (1) income and (2) work satisfaction. Pooling these four responses into a single index divided graduates into three groups—those who work and income satisfaction was "high"(25%), "medium"(32%), or "low" (44%).

The degree of work and income satisfaction is mainly a function of three factors: (1) salary level, (2) the relatedness of one's work to one's education, and (3) the type of work. Only a handful (6%)

of those with salaries under $7500 express high levels of satisfaction, compared to almost half (47%) of those with salaries above $10,000. Similarly, 60% of those who work at the "specific career" for which their education prepared them are categorized as "highly satisfied," while 71% of those in unrelated work rank low on the satisfaction scale. 54% of the professionals but only 10% of all non-professionals are highly satisfied with their work and income. Clerical workers rank as the least satisfied group of graduates.

Academic and work satisfaction go hand in hand (r = .31), as table 5.10 indicates. In general, those who derived the highest levels of satisfaction from their undergraduate education go on to reap the greatest rewards from their careers as well. Older students, those most interested in "working with people," those who majored in fields other than the Career Programs, and those who entered college with relatively clear ideas about their future careers all show higher than average levels of work and income satisfaction. Finally, high investments of time, effort and emotional involvement all led to increased levels of satisfaction -- both academic & personal, and work & income satisfaction.

Table 5.10: Work and Income Satisfaction, by Academic and Personal Satisfaction

Academic Satisfaction	Work and Income Satisfaction: High	Medium	Low	
High	43%	25	31	n= 99
Medium	28%	36%	36%	n= 95
Low	9%	34	43	n= 137

Satisfaction by Division

Generally, the amount of variation in either academic/personal or work/income satisfaction scores from one division to the next is minimal. There is, however, one glaring exception. On almost every item measuring any type of satisfaction, 1975 graduates of Boston State's career programs ranked substantially lower than graduates from any other part of the college. Table 5.11 is representative of this pattern. For the most part, these results reflect on the Law Enforcement program and raise questions about the effectiveness with which it has served the needs of Boston State students. However, more general questions need to be considered. Evidence cited earlier showed that work satisfaction is lowest when two unhappy contingencies intersect -- namely, when a student obtains a career-specific education and then fails to find work related to that training. These two factors were simultaneously present for an alarming number of Law Enforcement graduates, and the results are apparent. Secondly, the low levels of both academic and personal satisfaction that surface here, though they may have been aggravated somewhat by the ad hoc organization of the career programs in their early stages, may also reflect an unfortunate kind of double jeopardy. It is clear that those students who responded to the appeals of programs that offered them immediate employability did not reap the expected return in enhanced career potentialities. Did they also lose substantial amounts of personal growth and academic satisfaction in the bargain?

Table 5.11: Payoffs and Satisfaction Levels, by Division

Division	Items					Scales	
	KNOWLEDGE % hi	INCOME % hi,med	WORK SAT. % hi,med	GROWTH % hi	SELF-ESTEEM % hi	WORK SAT. % hi	ACADEMIC SAT. % hi
Career	41%	30%	33%	33%	26%	33%	22%
Education	51	50	68	61	54	65	30
Science	51	58	61	51	46	51	29
Social Science	49	42	59	62	51	51	28
Humanities	57	44	62	76	54	59	33

CODEBOOK

1975 BSC GRADUATE SURVEY

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
001		IDENTIFICATION NUMBER
002		YEAR OF BIRTH
003		GENDER (1)*
	162	1= male
	177	2= female
004		VETERAN (1)
	40	1= yes
	289	2= no
005		RACE (1)
	315	1= caucasian
	12	2= black
	2	3= oriental
	4	4= other
006		MARITAL STATUS (1)
	244	= single
	85	2= married
		3= widowed
	5	4= separated
	3	5= divorced
007		# OF DEPENDENTS (See Appendix F)
		8= 8 or more
008		HOMETOWN see appendix A
009		self-described family social class (2)
	7	1= lower class
	190	2= working class
	140	3= middle class
	2	4= upper class
010		number of kids (including self) (See Appendix F)
		8= 8 or more
011		college history of the family (4)
	141	1= first to attend college
	9	2= parents were first
	51	3= at least one grandparent
	135	4= brothers or sisters were first
012		father's occupational status 1 -7 (5) see app E
013		census code for father's occupation (5)

* Number in parentheses refers to the original question number.

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
014		parents with whom grew up
	305	1= both parents
	20	2= mother only
	6	3= father only
	9	4= other
015		mother's employment status
	182	1= not employed
	92	2= part-time
	63	3= full-time
016		steadiness of father's emp;oyment (8)
	310	1= steady, one kind
	9	2= steady, shift jobs
	14	3= occasional unemployment
017		mother's educational level (9) (See Appendix D)
018		father's educational level (9) (See Appendix D)
019		parent's income (10)
	42	1= below 8,000
	35	2= 8,000 - 9,999
	81	3= 10,000 - 11,999
	81	4= 12,000 - 14,999
	64	5= 15,000 - 19,999
	21	6= 20,000 - or more
020		parents income re neighborhood
	36	1= above average
	267	2= average
	35	3= below average
021		own rating of high school acad quality (12)
	57	1= excellent
	103	2= above average
	136	3= average
	33	4= below average
	10	5= seriously deficient
022		rank in high school class (13)
	65	1= upper 10%
	93	2= upper 25%
	92	3= upper 50%
	33	4= lower 50%
	12	5= lower 25%
	41	6= don't know
	2	7= not applicable
023		verbal score on S.A.T. s see appendix B (14)
024		math score on S.A.T.s see appendix B

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
025		% of H.S. who went to college (15)
	43	1= less than 25%
	106	2= 25 - 50
	86	3= 50 - 75
	50	4= more than 75%
	51	5= no idea
026		% of H.S. friends who attend college (16)
	65	1= very few
	38	2= 1/4
	46	3= 1/2
	63	4= 3/4
	119	5= almost all
027		with whom socialized during college (17)
	75	1= friends from h.s.
	135	2= new friends at BSC
	114	3= others
028		with which H.S. friends did you maintain contact during college? (18)
	104	1= college goers
	23	2= non college goers
	99	3= an equal mix
	107	4= little contact
029		prestige of friend's colleges compared to BSC (19)
	143	1= more prestigious
	125	2= about equal to BSC
	4	3= less prestigious
	61	4= don't know
030		parents highly value college education (20)
	262	1= mostly true
	61	2= partially true
	3	3= mostly untrue
031		parents don't und what college involves (20)
	33	1= mostly true
	134	2= partially true
	160	3= mostly untrue
032		parents seem to distrust college people (20)
	7	1= mostly true
	44	2= partially true
	276	3= mostly untrue
033		they dislike ideas promoted in college (20)
	6	1= mostly true
	80	2= partially true
	240	3= mostly untrue

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
034		parents feel college is way to get ahead (20)
	242	1= mostly true
	78	2= partially true
	8	3= mostly untrue
035		parents respected independence (21)
	151	1= mostly true
	97	2= partially true
	19	3= mostly untrue
036		parents did not treat as an adult (21)
	22	1= mostly true
	105	2= partially true
	140	3= mostly untrue
037		parents were supportive and encouraging
	182	1= mostly true
	72	2= partially true
	12	3= mostly untrue
038		parents envied chance to attend college
	55	1= mostly true
	85	2= partially true
	127	3= mostly untrue
039		parents interfered in personal life
	34	1= mostly true
	116	2= partially true
	117	3= mostly untrue
040		parents expected R to be fin ind
	60	1= mostly true
	103	2= partially true
	102	3= mostly untrue
041		impt to R not to financially rely on par
	128	1= mostly true
	97	2= partially true
	41	3= mostly untrue
042		did par encourage to attend college (22)
	4	1= no, opposed
	67	2= left decision to R
	80	3= glad but not pushy
	149	4= parents encouraged R
	20	5= parents pressured R
	12	6= one encou other no
043		parents feelings RE choice of BSC (23)
	1	1= par opposed
	5	2= par opposed BSC
	50	3= pref other coll
	135	4= pleased by BSC choice
	23	5= par suggested BSC
	2	6= one opp; other fav
	113	7= R did not consult par

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
044		when R decided to attend college (24)
	120	1= before high school
	87	2= h s hears 1 to 3
	61	3= as h s senior
	63	4= after h s graduation
045		# of colleges applied to besides BSC (26)
	56	0
	51	1
	104	2
	61	3
	24	4
	14	5
	4	6
	1	7
	2	8
046		# of colleges that accepted R
	84	0
	77	1
	87	2
	48	3
	12	4
	8	5
	1	7
	2	8
047		first reason for BSC choice (27)
	220	1= inexpensive
	17	2= easy to reach
	15	3= only place admitted
	10	4= close to home, frnds
	2	5= friends attend BSC
	60	6= pursue spec program
048		second reason for BSC choice
	60	1= inexpensive
	132	2= easy to reach
	11	3= only place admitted
	10	4= close to home frnds
	12	5= friends attend BSC
	47	6= pursue spec program

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
049		alternative to BSC attendance (28)
	12	1= gone to work directly
	20	2= attend 2-year college
	110	3= another state college
	79	4= attend U.Mass Boston
	89	5= attend another coll
	12	6= continue with work
	13	7= attend night school
050		which parent more encouraged college(29)
	151	1= both equally
	72	2= mother
	41	3= father
	68	4= neither one
	8	5= other
051		status upon entering BSC
	167	1= from high school
	20	2= from military
	38	3= from working
	5	4= after raising family
	40	5= from commty college
	25	6= from private college
052		student status upon BSC entry
	287	1= full-time day student
	1	2= part-time day student
	34	3= full-time evenings
	17	4= part-time evenings
053		STUDENT STATUS AT GRADUATION (31) 052
054		MAJOR FIELD (32) see appendix C
055		MINOR FIELD (33) see appendix C
056		DEFINITE MAJOR FIELD UPON BSC ENTRY (34)
	221	1= yes; completed
	76	2= yes switched
	41	3= no
057		RESIDENCE WHILE ATTENDING BSC (35)
	232	1= with parents
	27	2= parents but moved out
	35	3= away from parents
	44	4= with spouse, dependents

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
058		COLLEGE CAREER INTERRUPTIONS (36)
	16	1= illness
	23	2= lack of money
	6	3= military service
	6	4= low grades
	27	5= gnrl disillusionment
	4	6= marriage
	19	7= other
	4	8= none
059		YEARS TO RECEIVE A DEGREE (37)
	177	4
	94	5
	27	6
	15	7
	29	8 or more
060		MOST IMPORTANT MONEY SOURCE (38)
	181	1= own earnings
	66	2= parent's support
	2	3= spouse's support
	30	4= veteran's benefits
	39	5= scholarship, grants
	11	6= loans
SOURCE2		SECOND MONEY SOURCE (38)
	91	1= as above
	104	2= as above
	10	3= as above
	11	4= as above
	33	5= as above
	29	6= as above
061		THIRD MONEY SOURCE (38)
	42	1= as above
	38	2= as above
	9	3= as above
	2	4= as above
	23	5= as above
	27	6= as above
062		CONCERN FOR COVERING LABELS
	107	1= not a concern
	141	2= a concern
	84	3= a serious concern
063		FIND JOB AFTER GRADUATION (39)
	55	1= not a concern
	83	2= a concern
	193	3= a serious concern
064		WHAT TO DO AFTER GRADUATION
	78	1= same as above
	115	2= same as above
	137	3= same as above

VAR #	FREQ.	CONTENT LABEL AND SCORE VALUES
065		CONCERN: KEEPING UP WITH COURSEWORK
	115	1= not a concern
	152	2= a concern
	61	3= a serious concern
066		CONCERN: MEET NEW PEOPLE, FRIENDS
	200	1= same as above
	108	2= same as above
	20	3= same as above
067		CONCERN: PROBLEMS AT HOME
	204	1= same as above
	86	2= same as above
	40	3= same as above
068		CONCERN: NEW IDEAS VS, PERSONAL VALUES (39)
	137	1= same as above
	149	2= same as above
	42	3= same as above
069		CONCERN: MAINTAIN INTEREST IN COURSEWORK (39)
	124	1= not a concern
	162	2= a concern
	41	3= a serious concern
070		KNOWLEDGE VS. CREDENTIALS UPON ENTRY (40)
	142	1= knowledge, new ideas
	182	2= career credentials
071		KNOWLEDGE VS. CREDENTIAL AS SENIOR (41)
	145	1= same as above
	184	2= same as above
CARD 2		
072		REACTION TO PROFESSOR'S COMMENTS (42)
	138	1= most positive , enc
	63	2= usually spurred on
	130	3=-some enc; some disc
	2	4= most discouraging
073		CUMULATIVE GRADE POINT AVERAGE (43)
	86	1= 3.4 or above
	129	2= 3.0 to 3.39
	111	3= 2.5 to 2.99
	10	4= 2.0 to 2.49
	4	5= below 2.0
074		GRADES COMPARED TO EXPECTATIONS (44)
	124	1= better
	172	2= same
	40	3= grades worse
075		STUDENTS' ATTITUDE TOWARD BSC
	17	1= showed pride
	149	2= mildly satisfied
	103	3= mildly dissatisfied
	66	4= inferiority complex

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
076		PROFESSORS' ATTITUDE TOWARD BSC (46)
	61	1= same as above
	196	2= same as above
	58	3= same as above
	17	4= same as above
077		PROFESSORS' ATTITUBE TOWARD STUDENTS (47)
	94	1= very positive
	168	2= mildly positive
	63	3= indifferent
	9	4= subtly negative
	6	5= overly negative
078		FELT DEGREE WOULD IMPROVE SES (48)
	187	1= yes
	99	2= maybe
	49	3= no
079		NOW FEEL DEGREE WILL IMPROVE SES (49)
	119	1= same as above
	119	2= same as above
	95	3= same as above
080		HOW MUCH LEARNED VS. HOW MUCH EXPECTED (50)
	140	1= learned more
	138	2= as expected
	57	3= learned less
081		HOW SATISFIED WITH TOTAL BSC EXPERIENCE (51)
	124	1= very satisfied
	148	2= somewhat satisfied
	55	3= somewhat dissatisfied
	7	4= very dissatisfied
082		QUALITY OF TEACHING AT BSC (53)
	49	1= excellent
	266	2= good
	21	3= poor
	4	4= very poor
083		QUALITY OF BSC ED VS. WHAT WAS EXPECTED (54)
	85	1= ed better
	169	2= educ as expected
	44	3= educ words
	41	4= no expectations
084		DIFFICULTY VS. EXPECTATIONS
	28	1= expct easy; tough
	37	2= expct easy; easy
	99	3= expct tough; tough
	111	4= expct tough; easy

VAR#		FREQ.			CONTENT LABEL AND SCORE VALUES
085	086	087	088	089	CHOICE OF WISHFUL COURSE
CHOICE #'S					
(1)	(2)	(3)	(4)	(5)	
37	28	19	20	21	1= princip of mgmnt
15	13	15	12	14	2= am working class
43	23	21	20	8	3= accounting
32	28	28	26	15	4= human relations
5	18	9	11	15	5= orgztl theory
	2	1	1	3	6= art appreciation
11	27	11	14	14	7= group dynamics
11	20	17	17	20	8= social issues
32	20	20	15	8	9= creative writing
8	9	20	16	20	10= am economy
5	9	9	11	5	11= world literature
8	24	34	32	20	12= finance
2	2	2	1	1	13= music appr eciation
5	5	10	6	9	14= non-westrn cultures
31	23	11	13	14	15= read, write wrkshop
8	6	3	9	5	16= comparative religions
6	4	8	3	7	17= Shakespeare
4	10	18	12	29	18= political issues
12	24	23	21	16	19= business economics
31	12	20	17	22	20= computer
6	6	6	7	9	21= Marxist theory

VAR 090		HOURS WORKED PER WEEK AS STUDENT (58)
	21	1= 0
	41	2= less than 15
	170	3= 15 - 34
	57	4= 25 - 34
	46	5= 35 or more

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
091		TAKE HOME PAY DURING COLLEGE (59)
	18	0= 0
	10	1= $1 to 20
	32	2= 21 to 30
	67	3= 31 to 40
	62	4= 41 to 50
	34	5= 51 to 60
	46	6= 61 to 90
	40	7= 91 to 150
	16	8= over 150
	15	9= missing data
092		NUMBER OF JOBS SINCE GRADUATION (See Appendix H) code number; 8= 8 or more
093		PRESENT EMPLOYMENT STATUS (62)
	238	1= employed full-time
	37	2= seeking work
	40	3= part-time
	21	4= not in labor force
094		UNEMPLOYED SINCE GRADUATION?
	157	1= yes
	172	2= no
095		NUMBER OF MONTHS UNEMPLOYED (See Appendix H) code number of months
096		Respondent's Interest and Cooperativeness
	146	1= did not give name, etc
	190	2= gave name, address, etc.
097		CURRENT ANNUAL SALARY (65)
	49	1= up to 5,000
	63	2= 5,000 - 7,499
	99	3= 7,5000 - 9,999
	63	4= 10,000 - 12,499
	15	5= 12,500 - 14,999
	7	6= 15,000 - 19,999
	3	7= 20,000 - 24,999
	1	8= 25,000 or more
098		SATISFACTION WITH CURRENT SALARY (67)
	24	1= very satisfied
	115	2= satisfied
	93	3= dissatisfied
	75	4= very dissatisfied
099		JOB-EDUCATION CONNECTION (68)
	82	1= specific career
	49	2= related to major
	13	3= related to minor
	57	4= indirect relation
	109	5= unrelated

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUE
100		JOB'S LONG TERM CAREER POTENTIAL (69)
	109	1= definite potential
	105	2= some potential
	96	3= no potential
101		HOW SATISFIED WITH WORK NOW DOING (70)
	93	1= very satisfied
	110	2= satisfied
	64	3= dissatisfied
	45	4= very dissatisfied
102		CLEAR CAREER IDEA AT ENROLLMENT (71)
	30	1= no idea
	84	2= vague idea
	63	3= broad interest
	149	4= specific interest
103		PREFERENCE FOR PRESENT CAREER PURSUITS (72)
	151	1= strong preference
	50	2= other careers fine
	68	3= prefer other career
	49	4= no settled idea
104		NON-FINANCIAL JOB VALUE -1 (73)
	172	1= socially useful
	26	2= little pressure
	47	3= work with ideas
	35	4= leadership chances
	38	5= job security
	3	6= remain in area
		7= original,creative
	4	8= work with people
105		NON-FINANCIAL JOB VALUE -2 (73)
	3	1= socially useful
	13	2= little pressure
	50	3= work with ideas
	41	4= leadershop chances
	101	5= job security
	37	6= remain in area
	77	7= original,creative
		8= work with people
106		NON-FINANCIAL JOB VALUE -3 (73)
	4	1= socially useful
	2	2= little pressure
	2	3= work with ideas
	1	4= leadership chances
	19	5= job security
	17	6= remain in area
	57	7= original,creative
	219	8= work with people

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
107		CHANCES OF EVER GETTING IDEAL JOB
	28	1= zero
	90	2= slim
	76	3= decent
	67	4= good
	41	5= very good
108		CURRENT PLANS FOR GRADUATE SCHOOL (76)
	33	1= enrlld full -time
	69	2= enrlld part-time
	94	3= return next year
	59	4= return someday
	70	5= plans indefinite
	6	6= no grad school
109		HIGHEST DEGREE HOPE TO ATTAIN (77)
	25	1= bachelor's
	191	2= master's
	55	3= professional
	56	4= Ph.D., Ed. D.
110		REASON WHY NO PLANS FOR GRADUATE SCHOOL (78)
	11	1= financial obstacles
	1	2= low grades
	21	3= disenchanted
	13	4= family responsblties
	8	5= now well employed
	4	6= doubts own ability
111		EXPECTATIONS NOW VS. WHEN ENTERED
	131	1= brighter now
	95	2= same
	108	3= diminished
112		POWER STRUCTURE IDEOLOGY (80)
	67	1= pluralist
	256	2= enlitist
113		TIME INVESTMENT IN COLLEGE (81-A)
	147	1= heavy
	165	2= moderate
	22	3= low
	2	4= none
114		EFFORT INVESTMENT IN COLLEGE
	136	1= heavy
	174	2= moderate
	25	3= low
	2	4= none
115		EMOTIONAL INVESTMENT IN COLLEGE (81-A)
	142	1= heavy
	164	2= moderate
	24	3= low
	6	4= none

VAR#	FREQ.	CONTENT LABEL AND SCORE VALUES
116		FINANCIAL INVESTMENT IN COLLEGE (81-A)
	76	1= heavy
	139	2= moderate
	90	3= low
	31	4= none
117		KNOWLEDGE PAYOFF FROM COLLEGE (81-B)
	170	1= high
	150	2= medium
	15	3= low
	2	4= none
118		PRESTIGE PAYOFF FROM COLLEGE
	35	1= high
	193	2= medium
	79	3= low
	27	4= none
119		INCOME PAYOFF FROM COLLEGE
	24	1= high
	128	2= medium
	120	3= low
	57	4= none
120		WORK SATISFACTION PAYOFF FROM COLLEGE (81-B)
	100	1= high
	100	2= medium
	75	3= low
	51	4= none
121		PERSONAL GROWTH PAYOFF FROM COLLEGE
	202	1= high
	104	2= medium
	22	3= low
	7	4= none
122		SELF ESTEEM PAYOFF FROM COLLEGE
	168	1= high
	144	2= medium
	16	3= low
	7	4= none
123		WOULD YOU AGAIN ATTEND A 4-YEAR COLLEGE (82)
	312	1= yes
	24	2= no
124		WOULD YOU AGAIN ATTEND BOSTON STATE (82)
	203	1= yes
	121	2= no

APPENDIX A

HOMETOWN

Hometowns have been categorized according to the median income characteristic of that city or town, according to the U.S. Dept. of Commerce's 1970 Census of Population. Figures for Boston proper and its various incorporated neighborhoods were drawn from Social Facts by Census Tracts: 1970: Boston.

Percent	
14.3	1= below 9, 000
18.2	2= 9,000 - 9,999
13.0	3= 10,000 - 10,999
30.0	4= 11,000 - 11,999
11.1	5= 12,000 - 12,999
6.2	6= 13,000 - 13,999
7.2	7= 14,000 and over
	9= missing data
	33 cases missing

APPENDIX B

S.A.T. Scores

	Verbal	Math
1 = 200 - 350	3.3 %	6.0 %
2 = 351 - 400	17.4	14.3
3 = 401 - 450	15.4	18.7
4 = 451 - 500	24.1	22.3
5 = 501 - 550	19.1	17.0
6 = 551 - 600	12.0	12.0
7 = 601 - 650	6.0	6.0
8 = 651 - 800	2.7	3.7
9 = missing data	41	40

APPENDIX C

CODES FOR DEPARTMENTS (questions 32 and 33, major and minor)

DEPARTMENT	MAJORS		MINORS	
	N	PERCENT	N	PERCENT
01 Afro-American Studies	1	.3 %	2	1%
02 Art			14	5
03 Biology	18	5	15	5
04 Chemistry			6	2
05 Economics	4	1	10	3
06 Elementary Ed.	104	31	6	2
07 English	29	8	18	6
08 Speech				
09 Foreign Languages			2	1
10 Latin American Studies	5	1	3	1
11 History	18	5	46	15
12 Law Enforcement	23	7	10	3
13 Mathematics	11	3	15	5
14 Metropolitan Studies	2	1	5	2
15 Music			1	0
16 Natural Sciences	6	2	9	3
17 Nursing	1	.3		
18 Philosophy	1	.3	3	1
19 Physical Education	33	10	7	2
20 Physics				
21 Political Science	21	6	14	5
22 Public Service				
23 Regional Studies	12	4	5	2
24 Psychology	19	6	41	14
25 Sociology	27	8	17	6
26 Anthropology			4	1
27 Secondary Education			45	15
28 Business Management			3	1

APPENDIX D

Mother's and Father's Educational Level

	Mother	Father
0 = less than 8 years	4.8 %	5.7 %
1 = 8 years	4.8	6.9
2 = 9 to 11 years	13.5	14.5
3 = 12 years	58.0	46.5
4 = 13 years	3.6	3.6
5 = 14 years	8.4	9.4
6 = 15 years	1.8	3.0
7 = 16 years	3.6	5.7
8 = 17 or more years	1.5	4.5
9 = missing data	n = 7	n = 9

APPENDIX E

Father's Occupation and Occupational Prestige

occupation was coded by using the 3-digit census categories for occupations.

Prestige was coded by using the two-digit prestige scores as used by N.O.R.C. in its annual cross-sectional survey (GSS). These scores were collapsed into one-digit codes in the following manner:

1 = 10-19	8.7 %
2 = 20-29	11.7
3 = 30-39	25.3
4 = 40-49	36.1
5 = 50-59	9.9
6 = 60-69	5.4
7 = 70-79	2.7
8 = 80-89	
9 = missing data	n: 8

APPENDIX F: Number of Subject's Dependentd, and Number of Children (including self) in Respondent's Family of Origin

Number	Dependents		Siblings	
	N	Percent	N	Percent
0	261	81%		
1	36	11	14	4%
2	8	2	67	20
3	5	2	66	20
4	2	1	76	23
5	4	1	31	9
6	2	1	37	11
7	1	0	18	5
8 or more	2	1	21	6
missing cases	19		10	

APPENDIX H: Number of Months Unemployed and Number of Jobs Since Graduation

Code	Months Unemployed		# Jobs Since Graduation	
0	172	53%	12	4%
1	13	4	163	49
2	27	8	109	32
3	40	12	37	11
4	19	6	6	2
5	11	3	5	2
6	14	4	1	0
7	1	0	2	1
8	6	2		
9	5	2		
10 - 16	16	5		

OCCUPATIONAL LIST

JOB	FREQUENCY
Elementary school teachers	26
Secondary school teachers	22
Teachers, except college & university n.e.c. *	15
Policeman & detectives	10
Managers & administrators n.e.c.	9
Health technologists & technician n.e.c.	5
Vocational & educational counselors	5
Sales managers & department heads, retail stores	5
Social Workers	4
Office managers, n.e.c.	4
Sales clerk, retail trade	4
Secretaries, n.e.c.	4
Clerical & kindred workers--allocated	4
Janitors & sextons	4
Clinical laboratory technology & technician	3
Recreation workers	3
Prekindergarten & kindergarten teachers	3
Bank tellers	3
Insurance adjusters, examiners & investigators	3
Computer & peripheral equipment operators	3
Keypunch operators	3
Librarian	2
Therapist	2
Salesmen, retail trade	2
Bookkeeping & billing machine operators	2
Receptionists	2
Secretaries, medical	2
Shipping & receiving clerks	2
Statistical clerks	2
Typists	2
Miscellaneous clerical workers	2
Not specified clerical workers	2
Inspectors, n.e.c.	2
Not specified laborers	2
Guards & watchmen	2
Computer programmer	1
Engineers, n.e.c.	1
Statistician	1
Health record technologist & technician	1
Art, drama and music teachers	1
Teachers, college & university; subject not specified	1
Technicians, n.e.c.	1
Professional technical & kindred workers--allocated	1
Inspectors except construction , public administrators	1
Purchasing agents & buyers n.e.c.	1
Restaurant, cafeteria & bar managers	1
Insurance agents, brokers, underwriters	1
Sales representatives, manufacturing industries	1
Saleswork--allocated	1

n.e.c. = not elsewhere classified

JOB	FREQUENCY
Billing clerks	1
Bookkeepers	1
Clerical supervisors, n.e.c.	1
Collectors, bill & account	1
Counters clerks, except food	1
Enumerators & interviewers	1
Expediters & production controllers	1
Library attendants & assistants	1
Mail carriers, post office	1
Postal clerks	1
Secretaries, legal	1
Teachers aides, except school monitors	1
Electricians	1
Floor layers, except tile setters	1
Garage workers & gas station attendants	1
Packers & wrappers, n.e.c.	1
Bus Drivers	1
Deliverymen & routhen	1
Parking attendants	1
Stockhandlers	1
Laborers, except farm — allocated	1
Chambermaids & maids, except private household	1
Waiters	1
Health aides, except nursing	1
Child care workers, except private households	1
Ushers, recreation & amusement	1
Welfare service aides	1
Firemen, fire protection	1
Child care workers, private household	1

OCCUPATIONAL CATEGORIES		Cases
Professional	45%	99
Managerial	12%	24
Sales	4%	9
Clerical	23%	48
Manual	5%	15
Service	10%	24
unclassified (missing) or unemployed or outside labor force		121